

Set	Items	Description
S1	619	AU=(HIND, J? OR HIND J? OR PETERS, M? OR PETERS M? OR TOPO- L, B? OR TOPOL B?)
S2	46	S1 AND IC=H04L?
S3	5	S1 AND STYLE()SHEET?
S4	50	S2 OR S3

File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)  
(c) 2003 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2003/Nov W05  
(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031203,UT=20031127  
(c) 2003 WIPO/Univentio

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200379  
(c) 2003 Thomson Derwent

4/5/6 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01237014

METHOD AND APPARATUS FOR INITIALIZING SECURE COMMUNICATIONS AMONG, AND FOR  
EXCLUSIVELY PAIRING WIRELESS DEVICES  
VERFAHREN UND VORRICHTUNG ZUM INITIALISIEREN VON SICHEREN VERBINDUNGEN  
ZWISCHEN UND NUR ZWISCHEN ZUEINANDERGEHORENDEN SCHNURLOSEN  
EINRICHTUNGEN  
PROCEDE ET APPAREIL PERMETTANT D'INITIALISER DES COMMUNICATIONS PROTEGEES  
ENTRE DES DISPOSITIFS HERTZIENS APPARIES ET EXCLUSIVEMENT ENTRE CEUX-CI  
PATENT ASSIGNEE:

International Business Machines Corporation, (200128), New Orchard Road,  
Armonk, NY 10504, (US), (Applicant designated States: all)

INVENTOR:

HIND, John, Raithel , 5408 Harrington Grove Drive, Raleigh, NC 27613,  
(US)

PETERS, Marcia, Lambert , 712 Lochgarton Lane, Raleigh, NC 27614, (US)  
LEGAL REPRESENTATIVE:

Ling, Christopher John et al (80401), IBM United Kingdom Limited,  
Intellectual Property Department, Hursley Park, Winchester, Hampshire  
SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 1179244 A1 020213 (Basic)  
WO 200072506 001130

APPLICATION (CC, No, Date): EP 2000935289 000522; WO 2000GB1940 000522

PRIORITY (CC, No, Date): US 316805 990521; US 316804 990521; US 316686  
990521

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04L-009/32

CITED PATENTS (WO A): DE 19730301 C ; US 5621798 A

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010124 A1 International application. (Art. 158(1))

Application: 010124 A1 International application entering European  
phase

Application: 020213 A1 Published application with search report

Examination: 020213 A1 Date of request for examination: 20011203

LANGUAGE (Publication,Procedural,Application): English; English; English

4/5/7 (Item 4 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00774762

Transaction message routing in digital communications networks  
Weglenkung von Transaktionsnachrichten in einem digitalen  
Kommunikationsnetz  
Acheminement de messages de transaction dans un reseau numerique de  
communication

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY  
10504, (US), (Proprietor designated states: all)

INVENTOR:

Blakeley, Douglas Burnette, 1612 Stonehurst Rd, Raleigh NC 27607, (US)  
Kingston, William Anthony, 25 Hiltingbury Rd, Chandlersford, Hampshire,  
(GB)

Hind, John Raithel , 5408 Harrington Grove Drive, Raleigh NC 27613, (US)  
Housel III, Barron Cornelius, 702 Kensington Drive, Chapel Hill, NC 27514  
, (US)

LEGAL REPRESENTATIVE:

de Pena, Alain et al (15151), Compagnie IBM France Departement de la  
Propriete Intellectuelle, 06610 La Gaude, (FR)  
PATENT (CC, No, Kind, Date): EP 725523 A2 960807 (Basic)  
EP 725523 A3 970806  
EP 725523 B1 030723  
APPLICATION (CC, No, Date): EP 95480177 951206;  
PRIORITY (CC, No, Date): US 369051 950105  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: **H04L-012/56**  
CITED PATENTS (EP B): EP 282198 A; EP 608653 A; GB 2268374 A; US 5105424 A

ABSTRACT EP 725523 A2

Packet messages transmitted on a packet communications network include origin and destination addresses in the form of stacked address elements which can be pushed or popped off of the stack. A plurality of interconnected packet communications network include routing nodes which utilize the top address element on the destination stack to route the message. Such routing nodes also include stack element editing facilities for popping elements from the stacks, constructing new elements to be pushed onto the stacks, and amending the contents of elements on the stack. This arrangement allows messages to be launched on the networks where the originating station does not have full knowledge of the destination station, and the routing nodes add the necessary destination information as it becomes necessary for routing.  
(see image in original document)

ABSTRACT WORD COUNT: 151

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 020417 A2 Date of dispatch of the first examination  
report: 20020305  
Application: 960807 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Grant: 030723 B1 Granted patent  
Examination: 970122 A2 Date of filing of request for examination:  
961125  
Change: 970319 A2 Representative (change)  
Search Report: 970806 A3 Separate publication of the European or  
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	349
CLAIMS B	(English)	200330	345
CLAIMS B	(German)	200330	363
CLAIMS B	(French)	200330	365
SPEC A	(English)	EPAB96	6789
SPEC B	(English)	200330	6810
Total word count - document A			7139
Total word count - document B			7883
Total word count - documents A + B			15022

4/5/8 (Item 5 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00629087

Packet switching resource management within nodes.

Paketvermittlungsbetriebsmittelverwaltung in Knoten.

Gestion de ressources de commutation de paquets dans des noeuds.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)  
Dudley, John Gary, 6113 Gainsborough Drive, Raleigh, NC 27612, (US)  
Kaplan, Marc Adam, 14 Holly Hill Lane, Katonah, NY 10536, (US)  
Drake Jr., John Ellis, 321 Fearrington, Pittsboro, NC 27312, (US)  
Guerin, Roch, Scenic View 4H, Yorktown Heights, NY 10598, (US)  
Marin, Gerald Arnold, 3704 Sweeten Creek Road, Chapel Hill, NC 27514, (US)

**Peters, Maria Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)  
LEGAL REPRESENTATIVE:

Etorre, Yves Nicolas (87831), Compagnie IBM France, Departement Propriete  
Intellectuelle, 06610 La Gaude, (FR)  
PATENT (CC, No, Kind, Date): EP 613316 A2 940831 (Basic)  
EP 613316 A3 950412  
APPLICATION (CC, No, Date): EP 93480229 931215;  
PRIORITY (CC, No, Date): US 10136 930128  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: H04Q-011/04; H04L-012/56 ; H04L-012/18

ABSTRACT EP 613316 A2

Method and apparatus for making limited internal-node communication facilities externally visible in a packet switching network. Internal-node communication facilities are called intranode links, can include any cable, channel, bus, etc. over which data passes, and are used to connect the multiple subnodes within a given node. Each subnode contains a switching mechanism and routes packets to other nodes, subnodes, or user applications. Each node provides network control functions such as topology, directory, path selection, and bandwidth management which can manage intranode links in the same manner that internode links are currently managed. (see image in original document)  
ABSTRACT WORD COUNT: 100

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 940831 A2 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 950125 A2 Date of filing of request for examination:  
941125  
Change: 950329 A2 Obligatory supplementary classification  
(change)  
Search Report: 950412 A3 Separate publication of the European or  
International search report  
Examination: 970903 A2 Date of despatch of first examination report:  
970717  
Change: 981111 A2 Representative (change)  
Withdrawal: 990728 A2 Date on which the European patent application  
was deemed to be withdrawn: 990130

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	978
SPEC A	(English)	EPABF2	5180
Total word count - document A			6158
Total word count - document B			0
Total word count - documents A + B			6158

4/5/9

(Item 6 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00605930

Forming and maintaining access groups at the Lan/Wan interface  
Bildung und Aufrechterhaltung von Zugriffsgruppen an der Lan/Wan  
Schnittstelle  
Formation et maintien des groupes d'accès à l'interface Lan/Wan  
PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)



## INVENTOR:

Sandick, Haldon J., 2015 Wilson Street, Durham, NC 27705, (US)  
Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)  
Doeringer, Willibald A., Sihlwaldstrasse 4, Langnau, (CH)  
Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
Dykeman, Douglas H., Loostrasse 15/43, CH-8803 Rueschlikon, (CH)  
Li, Liang, 3613 Sweeten Creek Road, Chapel Hill, NC 27514, (US)  
**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)

## LEGAL REPRESENTATIVE:

Etorre, Yves Nicolas (87832), Compagnie IBM France Departement Propriete  
Intellectuelle Le Plan du Bois, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 598674 A1 940525 (Basic)  
EP 598674 B1 020807

APPLICATION (CC, No, Date): EP 93480165 931019;

PRIORITY (CC, No, Date): US 976826 921116

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **H04L-012/66**

CITED PATENTS (EP B): EP 234191 A; EP 511142 A

CITED REFERENCES (EP B):

IEEE TRANSACTIONS ON COMMUNICATIONS vol. 28, no. 4, April 1980, NEW  
YORK US pages 539 - 552 SCHWARTZ ET AL. 'Routing Techniques Used in  
Computer Communication Networks'

IEEE NETWORK: THE MAGAZINE OF COMPUTER COMMUNICATIONS no. 5, September  
1991, NEW YORK US pages 12 - 16 XP248468 BARRETT ET AL. 'LAN  
Interconnect Using X.25 Network Services';

ABSTRACT EP 598674 A1

Access agents (AA1-AA5) in nodes at the LAN/WAN interface are formed into a group of access agents so that the access agents may be managed by the WAN as a group. The group must maintain group operation integrity in that if communications between agents in the group are broken, the access agents will coalesce into subgroups and continue performing communication jobs as a group activity. Each of the access agents contains a finite state machine to perform the tasks of group formation and maintenance. The formation of interconnected access agents into a group is accomplished by one access agent being identified as a group leader. All other access agents communicating with the group leader within the LAN may then join the group. The maintenance of group activity integrity is accomplished by detecting a break in group communication integrity and thereafter reforming the group into multiple smaller groups. The maintenance of group operation integrity also includes the merger of small groups into a large group when a bridge is added between LAN segments. (see image in original document)

ABSTRACT WORD COUNT: 179

## NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 020807 B1 Granted patent

Application: 940525 A1 Published application (A1with Search Report  
;A2without Search Report)

Oppn None: 030730 B1 No opposition filed: 20030508

Examination: 941123 A1 Date of filing of request for examination:  
940927

Examination: 971210 A1 Date of despatch of first examination report:  
971023

Change: 990428 A1 Representative (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

## FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1247
CLAIMS B	(English)	200232	1620
CLAIMS B	(German)	200232	1620
CLAIMS B	(French)	200232	2014
SPEC A	(English)	EPABF2	5448
SPEC B	(English)	200232	5388
Total word count - document A			6697

Total word count - document B 10642  
Total word count - documents A + B 17339

4/5/10 (Item 7 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00605851

**Function distribution in a packet switched network**  
**Funktionsverteilung im Paketvermittlungsnetz**  
**Distribution de fonction dans un reseau de commutation de paquets**  
PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)

Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)

Dudley, John Gary, 6113 Gainsborough Drive, Raleigh, NC 27612, (US)

Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)

Janniello, James Patrick, 41 Ashton Road, Stamford, CT 06905, (US)

Kaplan, Marc Adam, 14 Holly Hill Lane, Katonah, NY 10536, (US)

Kesner, Barry, 5507 Shadowbrook Drive, Raleigh, NC 27612, (US)

Koperda, Francis Richard, 2020 Corberrie Lane, Raleigh, NC 27613, (US)

**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)

Potter, Kenneth Harvey, Jr., 5404 Amsterdam Place, Raleigh, NC 27606,  
(US)

Tsigler, Andrey Lev, Ducal S113 Marina baie des Anges, F-06270 Villeneuve  
Loubet, (FR)

Marin, Gerald Arnold, 3704 Sweeten Creek Road, Chapel Hill, NC 27514,  
(US)

Gopal, Inder Sarat, 555 North Avenue, Apt. 19N, Fort Lee, NJ 07024, (US)

Cidon, Israel, Technion - I.I.T. Elec. eng. dept., IL-Haifa 32000, (IL)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de Propriete  
Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 598671 A2 940525 (Basic)

EP 598671 A3 950125

EP 598671 B1 011212

APPLICATION (CC, No, Date): EP 93480067 930603;

PRIORITY (CC, No, Date): US 978609 921119

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: **H04L-012/56** ; **H04L-012/18** ; H04Q-011/04

CITED PATENTS (EP B): EP 303830 A; EP 404339 A; US 4813038 A

ABSTRACT EP 598671 A2

A packet switched communication system employing ANR and/or multicast tree routing is improved by using a Copy ID field in the network header of the packet. The Copy ID field defines a control function and allows packet processing to be distributed among the several processors of each node. The selection of the processor (or processors) to receive the packet may be accomplished by making use of the routing field of the network header to qualify the control function specified in the Copy ID field. The control message is processed as defined for the control function by the processor receiving the packet. In multicast tree routing the control function is performed at all nodes in the multicast tree. In ANR routing, a prefacing "selective copy" bit is included in each label in the routing field of the network header; each node employed in the packet transmission path uses one label. The selective copy bit in each label triggers or not (according to its setting) the copy function in that node. The network control function specified in the Copy ID field may be performed in a given node when the copy function is triggered for that node. (see image in original document)

ABSTRACT WORD COUNT: 202

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 011212 B1 Granted patent  
 Application: 940525 A2 Published application (Alwith Search Report  
 ;A2without Search Report)  
 Lapse: 030924 B1 Date of lapse of European Patent in a  
 contracting state (Country, date): CH  
 20020630, LI 20020630,  
 Oppn None: 021204 B1 No opposition filed: 20020913  
 Examination: 941123 A2 Date of filing of request for examination:  
 940927  
 Search Report: 950125 A3 Separate publication of the European or  
 International search report  
 Examination: 980610 A2 Date of despatch of first examination report:  
 980423

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1114
CLAIMS B	(English)	200150	695
CLAIMS B	(German)	200150	764
CLAIMS B	(French)	200150	784
SPEC A	(English)	EPABF2	4926
SPEC B	(English)	200150	4925
Total word count - document A			6040
Total word count - document B			7168
Total word count - documents A + B			13208

4/5/11 (Item 8 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00576199

**Multicast communication tree creation and control method and apparatus**  
**Verfahren und Vorrichtung zur Bildung und Steuerung eines**  
**Mehrempfängerübertragungsbaums**  
**Methode et appareil pour la creation et le controle d'un arbre de**  
**communication multidestinataire**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
 Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Auerbach, Joshua Seth, 20 Rolling Ridge Road, Ridgefield, CT 06877, (US)  
 Chow, Chee-Seng, 26 Prospect Avenue, 2nd Floor, Ossining, NY 10562, (US)  
 Peters, Marcia Lambert, 6 New Hope Trails, Pittsboro, NC 27312, (US)  
 Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
 Gopal, Prabandham Madan, 1043 Black Oak Ridge Road, Wayne, NJ 07470, (US)  
 Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)  
 Kaplan, Marc Adam, RFD 5 Holly Hill Lane, Katonah, NY 10536, (US)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de Propriete  
 Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 575281 A2 931222 (Basic)  
 EP 575281 A3 960214  
 EP 575281 B1 991117

APPLICATION (CC, No, Date): EP 93480060 930519;

PRIORITY (CC, No, Date): US 900628 920618

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: H04L-012/18

CITED PATENTS (EP B): EP 180990 A

CITED REFERENCES (EP B):

INTERNATIONAL CONFERENCE ON DISTRIBUTED COMPUTING SYSTEMS, ARLINGTON,  
 TEXAS, MAY 20 - 24, 1991, no. CONF. 11, 20 May 1991 INSTITUTE OF  
 ELECTRICAL AND ELECTRONICS ENGINEERS, pages 231-238, XP 000221861  
 AUERBACH J ET AL 'MULTICAST GROUP MEMBERSHIP MANAGEMENT IN HIGH SPEED  
 WIDE AREA NETWORKS'  
 MICROPROCESSORS AND MICROSYSTEMS, vol. 13, no. 9, 1 November 1989 pages

563-568, XP 000081216 HUGHES L 'SURVEY OF MULTICAST ADDRESS HANDLING  
TECHNIQUES FOR ETHERNET COMMUNICATION CONTROLLERS'  
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATION, vol. 9, no. 9, 1  
December 1991 pages 1427-1439, XP 000267533 SEGALL A ET AL 'RELIABLE  
MULTIUSER TREE SETUP WITH LOCAL IDENTIFIERS';

ABSTRACT EP 575281 A2

In a multicast network communication system, administration of the communication path making up the multicast tree itself has been separated from control and administration of the network. Creation of a multicast distribution tree and control over the membership thereof, is separately controlled independently from the creation and use of the tree transmission path used to communicate among the members of a multicast set. Transmission distribution trees are set up when a transmission request is received and the properties of the transmission path that is required are known. Transmission paths are created and controlled by all nodes in the communications system, each node having necessary control code and processors for responding to requests from set members to transmit a message to groups of users by creating and activating the necessary tree communication path distribution linkages. A distribution tree is created by the Tree Leader by generating a tree address using a random number generator. A tree address correlator is generated utilizing network and node identifiers unique for the network, and a list of subnodes or users connected for each member of the multicast tree set is generated. Using this information, a tree distribution path is computed to cover all of the subnodes required and a tree set up request message is sent by the Tree Leader along a computed path to each involved subnode. Each subnode returns a message indicating whether the tree address is already in use or is available for use. Successfully negotiated tree addresses are marked at the path link initiation and termination points at each node through the network. (see image in original document)

ABSTRACT WORD COUNT: 304

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

Lapse:	001025 B1	Date of lapse of European Patent in a contracting state (Country, date): BE 19991117,
Application:	931222 A2	Published application (Alwith Search Report ;A2without Search Report)
Lapse:	020626 B1	Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117, ES 19991117, SE 19991117,
Lapse:	001227 B1	Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117,
Lapse:	001213 B1	Date of lapse of European Patent in a contracting state (Country, date): BE 19991117, CH 20000222, LI 20000222,
Oppn None:	001102 B1	No opposition filed: 20000818
Lapse:	001220 B1	Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 20000222, LI 20000222,
Lapse:	020605 B1	Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117, SE 19991117,
Examination:	940629 A2	Date of filing of request for examination: 940429
Search Report:	960214 A3	Separate publication of the European or International search report
Examination:	980617 A2	Date of despatch of first examination report:

980504

Grant: 991117 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9946	1088
CLAIMS B	(German)	9946	1120
CLAIMS B	(French)	9946	1326
SPEC B	(English)	9946	9386
Total word count - document A			0
Total word count - document B			12920
Total word count - documents A + B			12920

4/5/12 (Item 9 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00576196

**Distributed management communications network**

**Kommunikationsnetz mit verteilter Verwaltung**

**Reseau de communications de gestion distribuee**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), New Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Auerbach, Joshua Seth, 20 Rolling Ridge Road, Ridgefield, CT 06877, (US)  
Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
Gopal, Prabandham Madan, 1043 Black Oak Ridge Road, Wayne, NJ 07470, (US)  
Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)  
Kaplan, Marc Adam, RFD 5 Holly Hill Lane, Katonah, NY 10536, (US)  
Kutten, Shay, 41 Lenox Street, Rockaway, NJ 07866, (US)

**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)

Ward, Michael James, 25 West Park Avenue, New Haven, CT 06511, (US)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de la Propriete  
Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 575279 A2 931222 (Basic)  
EP 575279 A3 940817  
EP 575279 B1 030723

APPLICATION (CC, No, Date): EP 93480056 930505;

PRIORITY (CC, No, Date): US 900647 920618

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: H04L-012/24 ; H04L-012/18 ; H04L-012/56

CITED PATENTS (EP B): EP 361649 A

CITED REFERENCES (EP B):

IBM TECHNICAL DISCLOSURE BULLETIN vol. 34, no. 8 , January 1992 , US  
pages 68 - 71 XP302049 'SCOPING MULTICASTS IN WAN INTERCONNECTED LOCAL  
NETWORKS';

ABSTRACT EP 575279 A2

A multinode, multicast communications network has a distributed control for the creation, administration and operational mode selection operative in each of the nodes of the network. Each node is provided with a Set Manager for controlling either creation of, administration or access to a set of users to whom a multicast is to be directed. The Set Manager maintains a record of the local membership of all users associated with the node in which the Set Manager resides. A given Set Manager for each designated set of users is assigned the task of being the Set Leader to maintain membership information about the entire set of users in the multicast group. One of the Set Managers in the communications network is designated to be the Registrar which maintains a list of all the Set Leaders in the network. The Registrar insures that there is one and only one Set Leader for each set of users, answers inquiries about the membership of the sets and directs inquiries to appropriate Set Leaders if necessary. All of the set creation, administration and control functions can therefore be carried out by any node of the system and

provision is made to assume the function at a new node when failure or partition in the network occurs. (see image in original document)

ABSTRACT WORD COUNT: 219

NOTE:

Figure number on first page: 2A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 030723 B1 Granted patent

Application: 931222 A2 Published application (Alwith Search Report  
;A2without Search Report)

Examination: 940629 A2 Date of filing of request for examination:  
940429

Search Report: 940817 A3 Separate publication of the European or  
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	514
CLAIMS B	(English)	200330	514
CLAIMS B	(German)	200330	433
CLAIMS B	(French)	200330	624
SPEC A	(English)	EPABF1	9441
SPEC B	(English)	200330	9355
Total word count - document A			9956
Total word count - document B			10926
Total word count - documents A + B			20882

4/5/13 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

01019938

**SMARTCARD SYSTEM**

**SYSTEME DE CARTE INTELLIGENTE**

Patent Applicant/Assignee:

ECEBS LIMITED, Ecebs House, 68 Dobscoft Road, Millhouses Sheffield,  
South Yorkshire S7 2LS, GB, GB (Residence), GB (Nationality), (For all  
designated states except: US)

Patent Applicant/Inventor:

BRESLIN Anthony, 21 Strathnaigh Avenue, East Kilbride, Scotland G75 8FW,  
GB, GB (Residence), GB (Nationality), (Designated only for: US)

**PETERS Michael**, 36 Boghead Road, Lenzie, Glasgow, Scotland G66 4EE, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

HOCHFELD Barry Sim, 21 Dalserf Crescent, Giffnock, Scotland G46 6RB, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

HARLAND Linda J (agent), Reddie & Grose, 16 Theobalds Road, London WC1X  
8PL, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200349056 A2 20030612 (WO 0349056)

Application: WO 2002GB5565 20021209 (PCT/WO GB0205565)

Priority Application: GB 200129360 20011207; GB 200225036 20021028

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G07F-019/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

French Abstract

Les systemes de telecommunication connus, qui comprennent un terminal Internet (1, 2, 6, 7) et un reseau qui permet de fournir un acces/service Internet offrent un nombre limite de possibilites utilisateur, que l'on peut augmenter par l'introduction de dependances vis a vis de l'utilisateur dans la conversion d'un (d'une partie d'un) localisateur de ressources universel ou URL dans une adresse IP. Cette adresse IP definit les informations a fournir audit terminal (1, 2, 6, 7), actuellement en fonction de l'utilisateur, par exemple en fonction de la localisation et/ou en fonction du temps. Des informations sur la localisation [Serveur de nom de domaine ou DNS (32, 42, 52, 93) avec contenu en fonction de la localisation, point de presence ou informations POP, adresse IP du terminal, numero de telephone du terminal, identificateur de l'utilisateur, systeme de positionnement global ou informations GPS, controleur de station de base ou informations BSC (90), codes de zones entrees par ledit utilisateur] partant dudit reseau ou dudit terminal (1, 2, 6, 7) et/ou des informations sur la synchronisation, provenant habituellement dudit reseau, y sont utilisees.

Legal Status (Type, Date, Text)

Publication 20011220 A1 With international search report.

Publication 20011220 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

4/5/15 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00759083 \*\*Image available\*\*

**METHOD AND APPARATUS FOR INITIALIZING SECURE COMMUNICATIONS AMONG, AND FOR EXCLUSIVELY PAIRING WIRELESS DEVICES**

**PROCEDE ET APPAREIL PERMETTANT D'INITIALISER DES COMMUNICATIONS PROTEGEES ENTRE DES DISPOSITIFS HERTZIENS APPARIES ET EXCLUSIVEMENT ENTRE CEUX-CI**

Patent Applicant/Assignee:

INTERNATIONAL BUSINESS MACHINES CORPORATION, New Orchard Road, Armonk, NY 10504, US, US (Residence), US (Nationality), (Designated only for: MC)

IBM UNITED KINGDOM LIMITED, P.O. Box 41, North Harbour, Portsmouth, Hampshire PO6 3AU, GB, GB (Residence), GB (Nationality), (Designated only for: MC)

Inventor(s):

**HIND John Raithel** , 5408 Harrington Grove Drive, Raleigh, NC 27613, US

**PETERS Marcia Lambert** , 712 Lochgarton Lane, Raleigh, NC 27614, US

Legal Representative:

LING Christopher John, IBM United Kingdom Limited, Intellectual Property Law Dept., Hursley Park, Winchester, Hampshire SO21 2JN, GB

Patent and Priority Information (Country, Number, Date):

Patent: WO 200072506 A1 20001130 (WO 0072506)

Application: WO 2000GB1940 20000522 (PCT/WO GB0001940)

Priority Application: US 99316805 19990521; US 99316804 19990521; US 99316686 19990521

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **H04L-009/32**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

English Abstract

A method and system for efficiently establishing secure communications between mobile devices in a radio network. The present invention utilizes public key cryptography and unique hardware identifiers to enable authorizations for access to wireless networks, such as picocells. The present invention prevents the mobile user from maintaining a plurality of secrets such as user identifier/password pairs, PINs, or encryption keys, for access to each device to which he might require access. Wireless devices distributed throughout an enterprise are enabled to be efficiently initialized for secure communications. Well-known public key cryptography and machine unique identifiers are utilized to establish a secure channel and initialize the wireless devices. Wireless devices are enabled to be paired or permanently associated by a user or a network administrator. Well known public key cryptography and machine unique identifiers are utilized to establish a secure channel and associate the devices with each other. This is extremely useful for associating a wireless headset with a telephone or associating a wireless mouse with a computer.

French Abstract

La presente invention concerne un procede et un systeme permettant d'etablir efficacement des communications protegees entre des dispositifs mobiles d'un reseau radio. Cette invention utilise une cryptographie a cle publique et des identificateurs materiel uniques pour autoriser l'accès aux reseaux hertziens, tels que des picocellules. Cette invention permet a l'utilisateur de mobile de ne pas avoir a conserver une pluralite de codes secrets tels que les doublets mot de passe/identification utilisateur, codes PIN ou cle de cryptage, permettant d'accéder a chaque dispositif pour lesquels il doit demander un acces. On peut efficacement initialiser des dispositifs hertziens distribues dans une entreprise en vue de communications protegees. On utilise la cryptographie a cle publique bien connue et des identificateurs machine unique pour etablir un canal protege et initialiser les dispositifs hertziens. Ces dispositifs hertziens peuvent etre appariees ou associes de facon permanente par un utilisateur ou un administrateur de reseau. On utilise la cryptographie a cle publique bien connue et les identificateurs machine unique pour etablir un canal protege et associer les dispositifs entre eux. Ce procede est tres utile pour associer un casque radio et un telephone ou pour associer une souris sans fil et un ordinateur.

Legal Status (Type, Date, Text)

Publication 20001130 A1 With international search report.

Examination 20010215 Request for preliminary examination prior to end of 19th month from priority date

4/5/16 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015769147 \*\*Image available\*\*

WPI Acc No: 2003-831349/200377

XRPX Acc No: N03-664324

Portal invocation control method e.g. for Yahoo portal, involves invoking group containing maximum number of portlets within set time mark and invoking other portlets in parallel with respect to maximum number of portlets

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: FISCHER P; HESMER S; KOEHLER D; SCHAECK T; STARK G; TOPOL B B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030188163	A1	20031002	US 2003351558	A	20030123	200377 B



Priority Applications (No Type Date): EP 20027110 A 20020328  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 20030188163 A1 14 H04L-009/00

Abstract (Basic): US 20030188163 A1

NOVELTY - The portlet invocation request is received and the invocation time corresponding to the requested portlet is estimated. The time mark for rendering the requested display contents, is set. A group containing maximum number of portlets (80,90) are determined and invoked, without exceeding the set time mark. The other portlets are operated in parallel with respect to the portlets (80,90).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) adaptive control system;
- (2) portal; and
- (3) computer program product for invoking portlets.

USE - For invoking portal using portlets, e.g. Yahoo portal including applications such as e-mail, calendar, organizer, banking, bill presentment.

ADVANTAGE - Effective invoking of portlets in less invocation time is enabled. Hence rapid response is ensured.

DESCRIPTION OF DRAWING(S) - The figure shows the structural view of the adaptive control system.

local portlet (80)  
remote portlet (90)  
pp; 14 DwgNo 6/10

Title Terms: PORTAL; CONTROL; METHOD; PORTAL; INVOKE; GROUP; CONTAIN;  
MAXIMUM; NUMBER; SET; TIME; MARK; INVOKE; PARALLEL; RESPECT; MAXIMUM;  
NUMBER

Derwent Class: T01

International Patent Class (Main): H04L-009/00

International Patent Class (Additional): H04L-009/32

File Segment: EPI

4/5/17

(Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015704019 \*\*Image available\*\*

WPI Acc No: 2003-766212/200372

XRPX Acc No: N03-613711

Secure integrated device with secure, dynamically-selectable capabilities used in computer system, has security core that provides security functions and that can vouch for authenticity of each securely and operably connected component

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030159044	A1	20030821	US 2001761906	A	20010117	200372 B

Priority Applications (No Type Date): US 2001761906 A 20010117

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 20030159044 A1 29 H04L-009/00

Abstract (Basic): US 20030159044 A1

NOVELTY - The device has a security core operated to provide security functions, and operably connected components coupled to the security core. The security core can vouch for authenticity of each securely and operably connected component e.g. biometric sensor, smart card reader.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (a) Computer program product storing codes for operating security core and operably connecting components to security core;
- (b) Security integrated device system;
- (c) Manufacture of security integrated device; and
- (d) Improving security of transactions in portable devices using the security integrated device.

USE - Used in a computer system.

ADVANTAGE - Provides a technique whereby multiple functions can be conveniently and economically provided in a single personal device, while still ensuring the security of the device and the operations it performs. Provides a technique for providing secure pluggable application processors and input and output processors. Authenticates each plugged-in component before trusting the plugged-in component. Improves security of transactions carried out with personal devices. Reduces cost and complexity in computing and communicating using pervasive computers.

DESCRIPTION OF DRAWING(S) - The figure shows the aspect of the secure integrated device for improving security using smart cards.

pp; 29 DwgNo 4/9

Title Terms: SECURE; INTEGRATE; DEVICE; SECURE; DYNAMIC; SELECT; CAPABLE; COMPUTER; SYSTEM; SECURE; CORE; SECURE; FUNCTION; CAN; AUTHENTICITY; SECURE; OPERATE; CONNECT; COMPONENT

Derwent Class: S05; T01; T04; T05; W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

4/5/18 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015633334 \*\*Image available\*\*

WPI Acc No: 2003-695516/200366

XRPX Acc No: N03-555306

**Data policy enforcement computer program product, has program code unit for executing selected policy enforcement objects during application of style sheets to input document and policy for referencing object**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)

Inventor: HIND J R ; LINDQUIST D B; TOPOL B B ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6585778	B1	20030701	US 99385899	A	19990830	200366 B

Priority Applications (No Type Date): US 99385899 A 19990830

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6585778	B1	16	G06F-017/27		

Abstract (Basic): US 6585778 B1

NOVELTY - The product has a program code for executing any one of instantiated policy enforcement objects during application of **style sheets** to an input document. The result of program code for executing an output document and the data policy for referencing objects that appear in the input document is reflected. The program code unit then instantiates policy enforcement objects associated with resolved references.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) a system for enforcing data policy
- (b) a method for enforcing data policy.

USE - Used for enforcing data policy.

ADVANTAGE - The data policy are efficiently enforced at an intermediate point in the delivery chain from a server application to a client in a complex networking environment. The data policy information may be different from one another and are specified by binding the data policy identifier to data objects in the document type definition (DTD)

to minimize policy related overhead during network transmission. The different data policies are applied to each different tagged item to provide maximum flexibility and no change is required in the **style sheet** that controls the transformation.

DESCRIPTION OF DRAWING(S) - The drawing shows a document type definition (DTD) that has been augmented with data policy information.

pp; 16 DwgNo 3/7

Title Terms: DATA; COMPUTER; PROGRAM; PRODUCT; PROGRAM; CODE; UNIT; EXECUTE ; SELECT; OBJECT; APPLY; STYLE; SHEET; INPUT; DOCUMENT; REFERENCE; OBJECT

Derwent Class: T01

International Patent Class (Main): G06F-017/27

File Segment: EPI

4/5/19 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015594532 \*\*Image available\*\*

WPI Acc No: 2003-656687/200362

XRPX Acc No: N03-523113

Style sheets location determining code, has sub process for applying style sheets subsets to client device and server or proxy, respectively based on determination as to which subset client device is capable of applying

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: BOAG S A; HIND J R ; TOPOL B B ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6589291	B1	20030708	US 99287989	A	19990408	200362 B

Priority Applications (No Type Date): US 99287989 A 19990408

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6589291	B1		12	G06F-015/00	

Abstract (Basic): US 6589291 B1

NOVELTY - The code has a sub process for processing an input document. Another sub process determines two subsets of **style sheets** that a client device is capable and not capable of applying, respectively. The latter sub process then applies the former subset to the client device and the latter to a server or a proxy.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a system for dynamically determining the most appropriate location for applying **style sheets** in a computing environment

(b) a method for dynamically determining the most appropriate location for applying **style sheets** in a computing environment.

USE - Used for determining the location for applying **style sheets**.

ADVANTAGE - The code dynamically determines the most appropriate location for applying the **style sheets** and increases the applicability of the **style sheets** when a **style sheet** tailored to a particular target environment is not readily available.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow chart describing the logic involved in determining the most appropriate location for applying **style sheets** in a computing environment.

pp; 12 DwgNo 3/3

Title Terms: STYLE; SHEET; LOCATE; DETERMINE; CODE; SUB; PROCESS; APPLY;

STYLE; SHEET; SUBSET; CLIENT; DEVICE; SERVE; RESPECTIVE; BASED; DETERMINE ; SUBSET; CLIENT; DEVICE; CAPABLE; APPLY.

Derwent Class: T01

International Patent Class (Main): G06F-015/00

File Segment: EPI

4/5/20 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015293013 \*\*Image available\*\*  
WPI Acc No: 2003-353947/200333  
XRPX Acc No: N03-282820

**Spoofed source internet protocol address determination method for network communication, involves judging spoofing of source IP address, when source IP address does not correspond to source media access control address**

Patent Assignee: DOYLE R P (DOYL-I); HIND J R (HIND-I); NARTEN T (NART-I);  
PETERS M L (PETE-I)

Inventor: DOYLE R P; HIND J R; NARTEN T; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030043853	A1	20030306	US 2001930351	A	20010815	200333 B

Priority Applications (No Type Date): US 2001930351 A 20010815

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030043853	A1	23	H04L-012/56	

Abstract (Basic): US 20030043853 A1

NOVELTY - A source media access control (MAC) address of the packet and the source IP address are evaluated to determine, if the source IP address corresponds to source MAC address. The source IP address of the packet is judged to be spoofed, when the source IP address does not correspond to the source MAC address.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) method of doing business;
- (2) system for determining packet; and
- (3) computer program product for spoofed source internet protocol address determination.

USE - For network communication using Internet protocol (IP).

ADVANTAGE - Enables reducing network degradation as result of denial of provision of service utilizing spoofed source IP addresses. Increases availability of the network attached storage device in the event of denial of provision of service.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the spoofed source internet protocol address determination.

pp; 23 DwgNo 2/11

Title Terms: SOURCE; PROTOCOL; ADDRESS; DETERMINE; METHOD; NETWORK;  
COMMUNICATE; JUDGEMENT; SOURCE; IP; ADDRESS; SOURCE; IP; ADDRESS;  
CORRESPOND; SOURCE; MEDIUM; ACCESS; CONTROL; ADDRESS

Derwent Class: T01; W01

International Patent Class (Main): H04L-012/56

File Segment: EPI

4/5/21 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015280542 \*\*Image available\*\*  
WPI Acc No: 2003-341473/200332  
XRPX Acc No: N03-273151

**Three-party connection providing method in voice-over-internet-protocol telephone call, involves mixing VoIP information from ports of two call participants and transferring to another call participant**

Patent Assignee: ROCKWELL FIRSTPOINT CONTACT CORP (ROCW ); PETERS M  
(PETE-I)

Inventor: PETERS M

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030012148	A1	20030116	US 2001902205	A	20010710	200332 B
GB 2379128	A	20030226	GB 200216024	A	20020710	200332
DE 10231191	A1	20030220	DE 1031191	A	20020710	200332

Priority Applications (No Type Date): US 2001902205 A 20010710

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030012148	A1	7	H04L-012/16	
GB 2379128	A		H04M-003/56	
DE 10231191	A1		H04M-003/56	

Abstract (Basic): US 20030012148 A1

NOVELTY - Two ports are provided within a transceiving terminal for receiving voice-over-internet-protocol (VoIP) voice information from two call participants, respectively. The VoIP information from the ports of the two call participants are mixed and transferred to another call participant.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for three-party connection providing apparatus.

USE - For providing three-party connection in voice-over-internet-protocol (VoIP) telephone call.

ADVANTAGE - Enables third party to participate in VoIP multipoint conference call.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of system providing software based single agent multipoint conference capability.

pp; 7 DwgNo 1/4

Title Terms: THREE; PARTY; CONNECT; METHOD; VOICE; PROTOCOL; TELEPHONE; CALL; MIX; INFORMATION; PORT; TWO; CALL; PARTICIPATING; TRANSFER; CALL; PARTICIPATING

Derwent Class: T01; W01

International Patent Class (Main): H04L-012/16 ; H04M-003/56

International Patent Class (Additional): H04L-012/18 ; H04L-012/66 ; H04M-007/00; H04M-011/08

File Segment: EPI

4/5/22 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015268546 \*\*Image available\*\*

WPI Acc No: 2003-329475/200331

XRPX Acc No: N03-263610

**Data writing method is SDRAM for computer system, involves providing spares byte enable information and initiating read sequence of old data from memory**

Patent Assignee: KLOBCAR J R (KLOB-I); PETERS M J (PETE-I)

Inventor: KLOBCAR J R; PETERS M J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030002466	A1	20030102	US 2001884270	A	20010619	200331 B

Priority Applications (No Type Date): US 2001884270 A 20010619

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030002466	A1	10	H04Q-007/24	

Abstract (Basic): US 20030002466 A1

NOVELTY - The sparse byte enable information indicating an initial block of data less than complete data word, is provided to a memory interface (144). The read sequence of old data from the memory (160) is initiated in response to the indication.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) computer memory control method; and
- (2) computer memory controller.

USE - For writing data in memory e.g. SDRAM, DRAM, RAM, SRAM, etc., for computer system.

ADVANTAGE - Reduces/eliminates the latency that is encountered if the memory interface is not aware of the spare byte enable condition until the first block of data arrived at the memory interface, thereby improving the efficiency and speed of the memory controller.

DESCRIPTION OF DRAWING(S) - The figure shows a functional block diagram of the memory controller.

memory interface (144)

memory (160)

pp; 10 DwgNo 1/3

Title Terms: DATA; WRITING; METHOD; COMPUTER; SYSTEM; SPARE; BYTE; ENABLE; INFORMATION; INITIATE; READ; SEQUENCE; DATA; MEMORY

Derwent Class: U13; U14

International Patent Class (Main): H04Q-007/24

International Patent Class (Additional): H04L-012/66

File Segment: EPI

4/5/23 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015125344 \*\*Image available\*\*

WPI Acc No: 2003-185868/200319

XRPX Acc No: N03-146422

**Configuration for combining two video digital time-aligned data streams uses first and second delaying elements to delay a data stream and a synchronized signal and read/write pointers to read/write data to memory.**

Patent Assignee: PHILIPS CORP INTELLECTUAL PROPERTY GMBH (PHIG ); KONINK PHILIPS ELECTRONICS NV (PHIG ); PHILIPS GLOEILAMPENFAB NV (PHIG ); PETERS M (PETE-I)

Inventor: PETERS M ; PETERS M P C

Number of Countries: 028 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1259065	A2	20021120	EP 2002100485	A	20020514	200319 B
US 20020181638	A1	20021205	US 2002144432	A	20020513	200319
DE 10123786	A1	20021121	DE 1023786	A	20010516	200319
JP 2003023606	A	20030124	JP 2002136775	A	20020513	200319

Priority Applications (No Type Date): DE 1023786 A 20010516

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1259065 A2 G 6 H04N-005/067

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20020181638 A1 H04L-007/00

DE 10123786 A1 G06F-005/06

JP 2003023606 A 6 H04N-005/92

Abstract (Basic): EP 1259065 A2

NOVELTY - A first delaying element (2) delays a first data stream (V1) by a first preset period. A second delaying element (3) delays a synchronized signal (S) for the first data stream by a second preset period. A second data stream (V2) is written to a memory (4) in accordance with a write pointer (WP) and read from it in accordance with a read pointer. (RP).

DETAILED DESCRIPTION - Each pulse of an undelayed synchronized signal (WPR) for the first data stream resets the write pointer. Each pulse of the synchronized signal for the first data stream delayed by the second delaying element resets the read pointer.

USE - For reducing noise in video data. For creating an image-on-image function.

ADVANTAGE - The first period is selected so that output data

streams for the first delaying element and for the memory appear on devices (6) for combining/processing in a required time relationship with each other. The second period is selected so that during the reading-from-memory process the reader pointer does not catch up with the write pointer even in respect of any discontinuities occurring in the second data stream.

DESCRIPTION OF DRAWING(S) - The drawing shows a block circuit diagram of a configuration for combining first and second video data streams.

First delaying element (2)

First data stream (V1)

Second delaying element (3)

Synchronized signal (S)

Second data stream (V2)

Memory (4)

Write pointer (WP)

Read pointer (RP)

Undelayed synchronized signal (WPR)

Devices for combining/processing in a required time relationship with each other (6)

pp; 6 DwgNo 1/1

Title Terms: CONFIGURATION; COMBINATION; TWO; VIDEO; DIGITAL; TIME; ALIGN; DATA; STREAM; FIRST; SECOND; DELAY; ELEMENT; DELAY; DATA; STREAM; SYNCHRONISATION; SIGNAL; READ; WRITING; POINT; READ; WRITING; DATA; MEMORY

Derwent Class: T01; W04

International Patent Class (Main): G06F-005/06; H04L-007/00 ; H04N-005/067 ; H04N-005/92

International Patent Class (Additional): H04J-003/06; H04J-003/08; H04L-025/00 ; H04N-005/265; H04N-005/45; H04N-005/93

File Segment: EPI

4/5/24 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015028956 \*\*Image available\*\*

WPI Acc No: 2003-089473/200308

XRAM Acc No: C03-022617

XRPX Acc No: N03-070513

Computer readable code for retrieving style sheets in computer system, stores extracted style sheet characteristics in repository along with identifier of selected style sheet

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)

Inventor: HIND J R ; LECTION D B; TIDWELL L D; TOPOL B B ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6463440	B1	20021008	US 99287988	A	19990408	200308 B

Priority Applications (No Type Date): US 99287988 A 19990408

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6463440	B1		15	G06F-017/30	

Abstract (Basic): US 6463440 B1

NOVELTY - One or more characteristics are associated with each style sheet. The associated characteristics are refracted for selected style sheets. The extracted characteristics are stored in a repository along with an identifier of the selected style sheet. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Style sheet retrieving system; and
- (2) Style sheet retrieving method.

USE - Computer readable core for retrieving style sheets for use in computer system.

ADVANTAGE - Enables to select and retrieve appropriate **style sheets** with high efficiency.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the **style sheet** retrieving method.

pp; 15 DwgNo 5/5

Title Terms: COMPUTER; READ; CODE; RETRIEVAL; STYLE; SHEET; COMPUTER; SYSTEM; STORAGE; EXTRACT; STYLE; SHEET; CHARACTERISTIC; REPOSITORY; IDENTIFY; SELECT; STYLE; SHEET

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

4/5/25 (Item 10 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014893221 \*\*Image available\*\*

WPI Acc No: 2002-713927/200277

XRPX Acc No: N02-563231

**Account-based transactions e.g. e-commerce transactions over internet using secure personal authorization criteria to prevent fraudulent use of account holder information**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM UK LTD (IBMC )

Inventor: **PETERS M E**

Number of Countries: 100 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200282392	A2	20021017	WO 2002GB1029	A	20020307	200277 B
US 20020161724	A1	20021031	US 2001827075	A	20010405	200279

Priority Applications (No Type Date): US 2001827075 A 20010405

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200282392	A2	E	21	G07F-019/00	
--------------	----	---	----	-------------	--

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020161724 A1 H04K-001/00

Abstract (Basic): WO 200282392 A2

NOVELTY - An account holder adds merchant-specific personal authorization criteria to the account record. Criteria is also established to control dealings with merchants for whom no explicit criteria exist.

USE - For securing electronic transactions e.g. e-commerce transactions over the internet between account holders, e.g. credit or debit card holders and a merchant.

ADVANTAGE - Improves the confidence of account holders that no misuse of information supplied to a merchant during transactions will occur.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic diagram of the system required to implement the method.

pp; 21 DwgNo 3/8

Title Terms: ACCOUNT; BASED; TRANSACTION; TRANSACTION; SECURE; PERSON; AUTHORISE; CRITERIA; PREVENT; FRAUD; ACCOUNT; HOLD; INFORMATION

Derwent Class: T01; T05

International Patent Class (Main): G07F-019/00; H04K-001/00

International Patent Class (Additional): G06F-017/60; H04L-009/00

File Segment: EPI

4/5/26 (Item 11 from file: 350)



DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014876883     \*\*Image available\*\*  
WPI Acc No: 2002-697589/200275  
XRPX Acc No: N02-550053

**Evidence provision system for pervasive device e.g. cellular phone,  
provides evidence collection contained in recorded data streams created  
by selected application processor**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020095601	A1	20020718	US 2001761899	A	20010117	200275 B

Priority Applications (No Type Date): US 2001761899 A 20010117.

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20020095601 A1 30 H04L-009/00

Abstract (Basic): US 20020095601 A1

NOVELTY - An authentication unit authenticates each application processor connected to a security core. A recording module records the data streams created by the selected processor. An evidence provision unit provides the evidence collection contained in the recorded data streams.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Evidence creation method; and
- (2) Computer program product storing evidence provision program.

USE - For pervasive devices such as pagers, cellular phones, foreign language translation devices, electronic address book device, wearable computing devices, vehicle-mounted devices e.g. on-board navigation system, computing devices adapted to use in the home such as intelligent sensor built into kitchen appliance, mobile computers, personal digital assistant (PDA), handheld computer, etc.

ADVANTAGE - Provides a provable chain of evidence for data streams created by devices connected to a processor. Provides improved security to data streams transmitted. Verifies the authenticity and the integrity of the evidence collection. Provides greater security, reduces weight, power consumption, implementation complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the establishment of provable chain of evidence.

pp; 30 DwgNo 8/9

Title Terms: EVIDENCE; PROVISION; SYSTEM; DEVICE; CELLULAR; TELEPHONE;  
EVIDENCE; COLLECT; CONTAIN; RECORD; DATA; STREAM; SELECT; APPLY;  
PROCESSOR

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

4/5/27     (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014835353     \*\*Image available\*\*  
WPI Acc No: 2002-656059/200270  
XRPX Acc No: N02-518521

**Biometric input provision system for cellular phones has security core  
connected to biometric sensor and card reader through I/O bus**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
-----------	------	------	-------------	------	------	------

US 20020095587 A1 20020718 US 2001764844 A 20010117 200270 B

Priority Applications (No Type Date): US 2001764844 A 20010117

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 20020095587 A1 26 H04L-009/00

Abstract (Basic): US 20020095587 A1

NOVELTY - A security core (150) provides security functions, for authentication of I/O components. A card reader (610) accesses secrets and identification information of an authorized card holder stored in a card (510). A biometric sensor (520), the card reader and the security core are connected securely.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Biometric input provision method;
- (2) Card; and
- (3) Computer program product.

USE - For pagers, cellular phones, foreign language translation device, electronic address book device, portable computer, on-board navigation system, intelligent sensor in kitchen appliance, personal digital assistant and handheld computers.

ADVANTAGE - Improves security of transactions carried out between personal devices, as the input/output component is plugged to the security core securely. Reduces weight, power consumption, complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the biometric input provision system.

Security core (150)  
Card (510)  
Biometric sensor (520)  
Card reader (610)  
pp; 26 DwgNo 6/9

Title Terms: INPUT; PROVISION; SYSTEM; CELLULAR; TELEPHONE; SECURE; CORE;  
CONNECT; SENSE; CARD; READ; THROUGH; BUS  
Derwent Class: S05; T01; T04; T05; W01  
International Patent Class (Main): H04L-009/00  
File Segment: EPI

4/5/28 (Item 13 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014815394 \*\*Image available\*\*

WPI Acc No: 2002-636100/200268

XRPX Acc No: N02-502593

**Continuous authentication providing system for user of computing device for e.g. pager, PDA, has comparator to compare repeated obtained**

**biometric input of user to securely stored biometric information of owner**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020095586	A1	20020718	US 2001764827	A	20010117	200268 B

Priority Applications (No Type Date): US 2001764827 A 20010117

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 20020095586 A1 28 H04L-009/32

Abstract (Basic): US 20020095586 A1

NOVELTY - A security component having security function, vouches for authenticity of component such as biometric sensors, input/output units, application processors, which are securely operably connected to it. A comparator compares the repeatedly obtained biometric input of

the user of the computing device to the securely stored biometric information of the owner, to authenticate the user.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Continuous authentication provision method; and
- (2) Computer program product for providing continuous authentication of user.

USE - For continuously authenticating user of pervasive computing device such as portable or personal computing devices, pager, cellular phones, foreign language translation devices, electronic address book devices, wearable computing devices, devices mounted in a vehicle such as on-board navigation system, kitchen appliances, mobile computers, PDAs, handheld computer.

ADVANTAGE - Improves security of the computing devices and the operation performed by it while reducing weight, footprint, power consumption, implementation complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the continuous authentication providing process.

pp; 28 DwgNo 7/9

Title Terms: CONTINUOUS; AUTHENTICITY; SYSTEM; USER; COMPUTATION; DEVICE; PAGE; COMPARATOR; COMPARE; REPEAT; OBTAIN; INPUT; USER; SECURE; STORAGE; INFORMATION; OWNER

Derwent Class: S05; T01; T04; W01

International Patent Class (Main): H04L-009/32

File Segment: EPI

4/5/29 (Item 14 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent All rts. reserv.

014660785 \*\*Image available\*\*

WPI Acc No: 2002-481489/200252

XRPX Acc No: N02-380347

**Packet switched mode call routing method in multimedia telecommunication network, involves storing application level location information to route packet switched mode call, upon receiving alerting message**

Patent Assignee: ALCATEL (COGE)

Inventor: BOS L M M R; PETERS M J H

Number of Countries: 028 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1206145	A1	20020515	EP 2000403157	A	20001113	200252 B
US 20020057668	A1	20020516	US 2001986697	A	20011109	200252
CN 1379604	A	20021113	CN 2001145792	A	20011113	200317

Priority Applications (No Type Date): EP 2000403157 A 20001113

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
-----------	------	------	----	----------	--------------

EP 1206145	A1	E	12	H04Q-007/22	
------------	----	---	----	-------------	--

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

US 20020057668	A1			H04J-003/24	
----------------	----	--	--	-------------	--

CN 1379604	A			H04Q-007/22	
------------	---	--	--	-------------	--

Abstract (Basic): EP 1206145 A1

NOVELTY - An alerting message (ALT) is sent to a user (B) who has not registered for call control on an application level, to alert the terminal (T2) of the user about an incoming packet switched mode call (PS). Upon reception of the alerting message, the application level location information (SIP-LOC-B) is stored in the application level location register (HPD) of the telecommunication network to route the packet switched mode call to the terminal.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) CSM multimedia telecommunication network;
- (2) Multimedia telecommunication terminal; and

(a) a network for use in a telecommunication system;  
(b) a terminal for use in a telecommunication system;  
(c) a signal generator for use in a telecommunication system;  
(d) and a method for use in a telecommunication system for receiving at least one control signal from a user via a terminal.  
USE - Telecommunication system.

ADVANTAGE - Provides telecommunication system which is more user-friendly.

DESCRIPTION OF DRAWING(S) - The figure illustrates the telecommunication system.

Internet terminal (1,2,6,7)

pp; 16 DwgNo 1/1

Title Terms: TELECOMMUNICATION; SYSTEM; SIGNAL; GENERATOR; PRODUCE; ONE;

ADDRESS; SIGNAL; RESPOND; ONE; CONTROL; SIGNAL; USER; DEPEND; WAY

Derwent Class: T01; W01

International Patent Class (Main): H04L-029/12

International Patent Class (Additional): G06F-017/30; H04L-029/06

File Segment: EPI

4/5/32 (Item 17 from file: 350)

DIALOG(R) File 350; Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014144158 \*\*Image available\*\*

WPI Acc No: 2001-628369/200173

XRPX Acc No: N01-468631

Communication device authentication system in client-server network, processes message from one device only if the device is determined to be authentic, based on which receiving device transmits response message

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2359969	A	20010905	GB 200026181	A	20001026	200173 B

Priority Applications (No Type Date): US 99435417 A 19991108

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2359969	A	59	H04L-009/32	

Abstract (Basic): GB 2359969 A

NOVELTY - A device certificate identifies a device using an identifier associated with a network adaptor card of the device. The created public and private keys are stored in the device certificate and the device, respectively. A message from the transmitting device is processed if the device is determined as authentic, based on which a receiving device generates and transmits response message.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for device certificates using method.

USE - E.g. computer such as laptops, portable computers, vehicle-mounted devices, desktop computers, main frame computers etc., in client-server network.

ADVANTAGE - A device is uniquely identified by a device identifier stored in a digital certificate. Since a pair of public and private keys are provided for the device, misuse of the device is prevented easily.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of computer workstation.

pp; 59 DwgNo 1A/6

Title Terms: COMMUNICATE; DEVICE; AUTHENTICITY; SYSTEM; CLIENT; SERVE;

NETWORK; PROCESS; MESSAGE; ONE; DEVICE; DEVICE; DETERMINE; AUTHENTICITY;

BASED; RECEIVE; DEVICE; TRANSMIT; RESPOND; MESSAGE

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/32

International Patent Class (Additional): G06F-001/00; H04L-029/06

Title Terms: TERMINAL; SERVE; TRANSLATION; APPLY; SIGNAL; PREDEFINED; APPLY  
; OPEN; SIGNAL; VICE-VERSA; OPEN; SIGNAL; INDEPENDENT; UNDERLYING;  
TECHNOLOGY; TERMINAL; CAPABLE; UNIT  
Derwent Class: W01  
International Patent Class (Main): G06F-009/44; H04B-001/38; H04M-001/725;  
H04Q-007/20; H04Q-007/32; H04Q-007/36  
International Patent Class (Additional): H04B-007/26; H04L-012/16 ;  
H04M-001/00; H04M-001/247; H04Q-007/38  
File Segment: EPI

4/5/34 (Item 19 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013999788 \*\*Image available\*\*  
WPI Acc No: 2001-484002/200153  
XRPX Acc No: N01-358222

**Selective data encoding by application of style - sheet processing for document elements in computer environment, involves carrying out selected support objects on given input document during use of one or more style - sheets**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )  
Inventor: DAVIS M C; HIND J R; PETERS M L; TOPOL B B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10051571	A1	20010426	DE 1051571	A	20001018	200153 B

Priority Applications (No Type Date): US 99422430 A 19991021

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 10051571	A1	6	H04L-009/00	

Abstract (Basic): DE 10051571 A1

NOVELTY - Documents are subject to selective encoding for protecting the information against unintentional publication, and include XML-documents and XSL-processors, and following preparation of an input-document, one or several support objects are prepared, and then a document-type definition (DTD) corresponding to the given input document. Selected prescribed support objects are carried out during use of one or more **style - sheets** on the given input document, resulting in an interim document. One or several randomly generated encoding keys are then generated, and the selected elements of the interim documents are encoded, to prepared producing an encoded output document with zero or more unencoded elements. The find (result) documents is produced on a given client device, with encoding of the given received documents for a discrete user or process on the stated client device.

USE - Computer system, and especially on computer program for selective encoding of one or more document elements by the use of **style sheet** processing.

ADVANTAGE - Provides efficient support of the safety measures in complex distributed networks. Enables data to be protected during the entire business process and during the transmission between agents in a network path from a document server to a document receiver.

DESCRIPTION OF DRAWING(S) - A block diagram of a computer work station environment in which the proposal can be carried out is given.

Single user computer workstation (10)

Microprocessor (12)

Bus (14)

User interface-adapter (16)

Keyboard (18)

Mouse (20)

Interface devices (22)

Display device (24)

Display adapter (26)

Memory (28)

Long-term store (30)

pp; 6 DwgNo 1/2

Title Terms: SELECT; DATA; ENCODE; APPLY; STYLE; SHEET; PROCESS; DOCUMENT;  
ELEMENT; COMPUTER; ENVIRONMENT; CARRY; SELECT; SUPPORT; OBJECT; INPUT;  
DOCUMENT; ONE; MORE; STYLE; SHEET

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/00

International Patent Class (Additional): G06F-012/14

File Segment: EPI

4/5/35 (Item 20 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013762661 \*\*Image available\*\*

WPI Acc No: 2001-246872/200126

XRPX Acc No: N01-175844

Mobile telecommunications terminal for use in a mobile network such as  
Global System for Mobile communication, includes additional decoders to  
improve reception capability

Patent Assignee: ALCATEL (COGE ); ALCATEL ALSTHOM CIE GEN ELECTRICITE  
(COGE )

Inventor: BERNARD G G D G; PETERS M J H

Number of Countries: 028 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1083762	A1	20010314	EP 99402220	A	19990909	200126 B
AU 200045153	A	20010315	AU 200045153	A	20000710	200126
HU 200002955	A2	20010328	HU 20002955	A	20000727	200126
JP 2001127697	A	20010511	JP 2000260275	A	20000830	200133

Priority Applications (No Type Date): EP 99402220 A 19990909

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

EP 1083762	A1 E	8	H04Q-007/30	
------------	------	---	-------------	--

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI

AU 200045153	A		H04Q-007/32
--------------	---	--	-------------

HU 200002955	A2		H04Q-007/32
--------------	----	--	-------------

JP 2001127697	A	18	H04B-007/26
---------------	---	----	-------------

Abstract (Basic): EP 1083762 A1

NOVELTY - Mobile telecommunication terminal (TA) includes codec  
(CA) for communication using a first predefined code type. It also  
includes a second decoder (DB) which operates according to a second  
predefined code type, but does not include an associated encoder. This  
second encoder can be temporarily stored in a memory of the handset and  
may be downloaded, e.g. from the Internet.

USE - For use in mobile telecommunications systems such as Global  
System for Mobile communication and Universal Mobile Telecommunication  
Standard networks.

ADVANTAGE - The second decoder is software that may be downloaded  
from the Internet, which enables the handset to be adapted to receive  
from a terminal of a different type or to be updated to the latest  
version of a particular type. This flexibility optimizes communication  
reception and is even applicable in the case of transcoding free  
operation not being enabled, moreover cost is also reduced since  
decoders are generally available to be downloaded free whilst encoders  
are relatively expensive to purchase.

DESCRIPTION OF DRAWING(S) - The figure represents a mobile  
telecommunication terminal used in a telecommunication network.

Codec ((DB) Decoder ((TA) Mobile telecommunication terminal. (CA)

pp; 8 DwgNo 1/1

Title Terms: MOBILE; TELECOMMUNICATION; TERMINAL; MOBILE; NETWORK; GLOBE;  
SYSTEM; MOBILE; COMMUNICATE; ADD; DECODE; IMPROVE; RECEPTION; CAPABLE

Derwent Class: U21; U25; W01  
International Patent Class (Main): H04B-007/26; H04Q-007/30; H04Q-007/32  
International Patent Class (Additional): H04L-029/06 ; H04Q-007/38  
File Segment: EPI

4/5/36 (Item 21 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013653409 \*\*Image available\*\*  
WPI Acc No: 2001-137621/200114  
XRPX Acc No: N01-100283

Secure communication initialization method for communication of mobile devices involves setting key agreement between mobile devices to set secure communication based on verification of challenge signature

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM UK LTD (IBMC )

Inventor: HIND J R ; PETERS M L

Number of Countries: 094 Number of Patents: 011

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200072506	A1	20001130	WO 2000GB1940	A	20000522	200114 B
AU 200050845	A	20001212	AU 200050845	A	20000522	200115
EP 1179244	A1	20020213	EP 2000935289	A	20000522	200219
			WO 2000GB1940	A	20000522	
KR 2001114272	A	20011231	KR 2001714798	A	20011120	200240
CZ 200104168	A3	20020515	WO 2000GB1940	A	20000522	200241
			CZ 20014168	A	20000522	
CN 1351789	A	20020529	CN 2000807652	A	20000522	200258
HU 200201561	A2	20020930	WO 2000GB1940	A	20000522	200272
			HU 20021561	A	20000522	
TW 478269	A	20020301	TW 2000109589	A	20000518	200305
TW 480864	A	20020321	TW 2000109590	A	20000518	200308
JP 2003500923	W	20030107	JP 2000619855	A	20000522	200314
			WO 2000GB1940	A	20000522	
TW 498669	A	20020811	TW 2000109588	A	20000518	200331

Priority Applications (No Type Date): US 99316805 A 19990521; US 99316686 A 19990521; US 99316804 A 19990521

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200072506	A1	E	43	H04L-009/32	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
AU 200050845	A			H04L-009/32	Based on patent WO 200072506
EP 1179244	A1	E		H04L-009/32	Based on patent WO 200072506
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
KR 2001114272	A			H04L-009/32	
CZ 200104168	A3			H04L-009/32	Based on patent WO 200072506
CN 1351789	A			H04L-009/32	
HU 200201561	A2			H04L-009/32	Based on patent WO 200072506
TW 478269	A			H04L-009/32	
TW 480864	A			H04L-009/32	
JP 2003500923	W		53	H04L-009/32	Based on patent WO 200072506
TW 498669	A			H04L-009/32	

Abstract (Basic): WO 200072506 A1

NOVELTY - The signing of the received challenge is performed in mobile devices (2001,2003) in response to the challenge exchange using a private key to the respective protected storage in each mobile device. A key agreement between the mobile devices is set to establish a secure communication based on the success of the cryptographic

verification of the received challenge signature within the sent challenge.

DETAILED DESCRIPTION - The method involves establishing a session between mobile devices in a radio network. A two-way session encryption and the mutual authentication requirements are negotiated between the mobile devices. The device certificates of the mobile devices are exchanged. The received certificate is cryptographically verified using the public key of a certificate authority. The exchange of the challenges created by the mobile devices, is performed. INDEPENDENT CLAIMS are also included for the following:

(a) a computer program for initializing secure communication between mobile devices;

(b) and a secure communication initialization system.

USE - For establishing communication between mobile devices in radio network.

ADVANTAGE - Enables initializing secure communication between mobile devices without requiring manual entry of user's identifiers, passwords or cryptographic keys, hence reducing security exposures associated with manual entry. Enables efficient administration of secure devices within an enterprise without creating additional administrative overhead for initializing the devices.

DESCRIPTION OF DRAWING(S) - The figure shows the authentication flow diagram for secure communication initialization method.

Mobile devices (2001,2003)

pp; 43 DwgNo 4/9

Title Terms: SECURE; COMMUNICATE; INITIALISE; METHOD; COMMUNICATE; MOBILE; DEVICE; SET; KEY; AGREE; MOBILE; DEVICE; SET; SECURE; COMMUNICATE; BASED; VERIFICATION; SIGNATURE

Derwent Class: T01; W01; W02

International Patent Class (Main): H04L-009/32

International Patent Class (Additional): G06F-015/00; H04L-009/08

File Segment: EPI

4/5/37 (Item 22 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013500134 \*\*Image available\*\*

WPI Acc No: 2000-672075/200065

XRPX Acc No: N00-498229

Computer program for certificate based authentication for system network architecture communication, has module to create packet comprising token, signature and certificate chain to verify user authentication

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; KING J H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6128738	A	20001003	US 9864632	A	19980422	200065 B

Priority Applications (No Type Date): US 9864632 A 19980422

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6128738 A 12 H04L-009/00

Abstract (Basic): US 6128738 A

NOVELTY - The computer program includes a module to identify token, token signature and certificate chain of computer user and to create a communication packet. The communication packet is transmitted to the computer systems accessible by user. User authorization to access data at computer systems is performed using received communication packet.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) certificate based authentication apparatus;

(b) method for controlling access

USE - For certificate based authentication in system network



architecture (SNA) communication.

ADVANTAGE - Enables use of single client certificate for multiple applications. Eliminates the need for a trusted third party or multiple user ID and password pairs.

DESCRIPTION OF DRAWING(S) - The figure shows the explanatory drawing of certificate based authentication.

pp; 12 DwgNo 5/7

Title Terms: COMPUTER; PROGRAM; CERTIFY; BASED; AUTHENTICITY; SYSTEM; NETWORK; ARCHITECTURE; COMMUNICATE; MODULE; PACKET; COMPRISE; TOKEN; SIGNATURE; CERTIFY; CHAIN; VERIFICATION; USER; AUTHENTICITY

Derwent Class: W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

4/5/38 (Item 23 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013455792 \*\*Image available\*\*

WPI Acc No: 2000-627735/200060

XPX Acc No: N00-465078

**End-to-end route selection in compound wide or local area networks, involves establishing route by selecting route between branch network and origin or destination node in branch network**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6097727	A	20000801	US 97841212	A	19970429	200060 B

Priority Applications (No Type Date): US 97841212 A 19970429

Patent Details:

Patent No	Kind	Ian Pg	Main IPC	Filing Notes
US 6097727	A	40	H04L-012/28	

Abstract (Basic): US 6097727 A

NOVELTY - A route calculated by a network node is established between origin node and destination node by selecting a route between branch network and one of the origin node or destination node in the branch network. The selected route is modified to expand the selected route to one of the origin node or the destination node to establish a modified route.

DETAILED DESCRIPTION - A route is established between origin node and destination node. The route is modified by modifying tail vectors of the origin node or destination node in the branch network to represent tail vectors of an intermediate node. The modified tail vectors are passed to the network node. A selected route between the first branch network and one of the origin node or destination node not in the first branch network is received. A link connecting the intermediate node and origin or destination node in the branch network is added to the selected route. INDEPENDENT CLAIMS are also included for the following:

(a) system for establishing communication path;

(b) program for establishing communication path

USE - For end to end route selection in compound wide or local area network.

ADVANTAGE - Provides complete end-to-end, non-disruptive re-routing without adversely affecting the routing algorithms ordinarily implemented in an APPN network. Improves establishment of end-to-end communication path in a relatively large communication network.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the single combined local area network or wide area network.

pp; 40 DwgNo 1/18

Title Terms: END; END; ROUTE; SELECT; COMPOUND; WIDE; LOCAL; AREA; NETWORK; ESTABLISH; ROUTE; SELECT; ROUTE; BRANCH; NETWORK; ORIGIN; DESTINATION;

NODE; BRANCH; NETWORK  
Derwent Class: W01  
International Patent Class (Main): H04L-012/28  
File Segment: EPI

4/5/39 (Item 24 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013441813  
WPI Acc No: 2000-613756/200059  
XRPX Acc No: N00-454782

**X.509 certificate capable of supporting cryptographic algorithms for security of transactions and documents on the Internet using public key to identify alternative algorithm signature extensions**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )  
Inventor: PETERS M E  
Number of Countries: 003 Number of Patents: 004

**Patent Family:**

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2347057	A	20000823	GB 9929705	A	19991217	200059 B
JP 2000224164	A	20000811	JP 20009659	A	20000119	200059
KR 2000057771	A	20000925	KR 20002345	A	20000119	200122
GB 2347057	B	20031105	GB 9929705	A	19991217	200377

Priority Applications (No Type Date): US 99240265 A 19990129

**Patent Details:**

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2347057	A		11	H04L-009/32	
JP 2000224164	A		8	H04L-009/32	
KR 2000057771	A			H04L-009/14	
GB 2347057	B			H04L-009/32	

Abstract (Basic): GB 2347057 A

NOVELTY - Algorithm signature extensions (74) define a second (or more) cryptographic algorithm utilized to verify the certificate. These are not authenticated by the primary signature and signature algorithm, they are reviewed by a receiving entity if the entity does not support the algorithm of the primary signature.

USE - For security of transactions and documents on the Internet.

ADVANTAGE - A new certificate hierarchy while maintaining backward compatibility is not required to support one or more encryption algorithms.

DESCRIPTION OF DRAWING(S) - The figure shows an illustration of an X.509 certificate having extensions capable of supporting one or more cryptographic algorithms.

Algorithm Signature Extensions (74)

pp; 11 DwgNo 0/4

Title Terms: CERTIFY; CAPABLE; SUPPORT; CRYPTOGRAPHIC; ALGORITHM; SECURE; TRANSACTION; DOCUMENT; PUBLIC; KEY; IDENTIFY; ALTERNATIVE; ALGORITHM; SIGNATURE; EXTEND

Derwent Class: P85; W01

International Patent Class (Main): H04L-009/14 ; H04L-009/32

International Patent Class (Additional): G09C-001/00

File Segment: EPI; EngPI

4/5/40 (Item 25 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013396471 \*\*Image available\*\*  
WPI Acc No: 2000-568409/200053  
XRPX Acc No: N00-419941

**Web content compatibility procedure for data processing system, involves dispersing compatible function between client data processing system and**

**server data processing system**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )  
Inventor: BRITTON K H; CHOI O H; FLOYD R A; HAYES K F; KESSLER C S; MILLER  
B A; **TOPOL B B**

Number of Countries: 005 Number of Patents: 006

**Patent Family:**

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000222274	A	20000811	JP 20002123	A	20000111	200053 B
GB 2348525	A	20001004	GB 9929750	A	19991217	200053
CA 2292327	A1	20000726	CA 2292327	A	19991216	200054
KR 2000053468	A	20000825	KR 20001453	A	20000113	200121
GB 2348525	B	20031112	GB 9929750	A	19991217	200375
US 6654814	B1	20031125	US 99237544	A	19990126	200378

Priority Applications (No Type Date): US 99237544 A 19990126

**Patent Details:**

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000222274	A		24	G06F-012/00	
GB 2348525	A			G06F-009/46	
CA 2292327	A1 E			H04L-012/12	
KR 2000053468	A			G06F-015/16	
GB 2348525	B			G06F-009/46	
US 6654814	B1			G06F-015/16	

**Abstract (Basic): JP 2000222274 A**

NOVELTY - An information on specific session is acquired from a data processing system. A compatible function is dispersed between a client data processing system and server data processing system based on the acquired information on a specific session.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the web content compatibility system.

USE - For forwarding and displaying of web content between data processing system.

ADVANTAGE - Improves content compatibility for data processing systems e.g. computer device.

DESCRIPTION OF DRAWING(S) - The figure shows the explanatory diagram of a web content compatibility system.

pp; 24 DwgNo 1/5

Title Terms: WEB; CONTENT; COMPATIBLE; PROCEDURE; DATA; PROCESS; SYSTEM; DISPERSE; COMPATIBLE; FUNCTION; CLIENT; DATA; PROCESS; SYSTEM; SERVE; DATA; PROCESS; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-009/46; G06F-012/00; G06F-015/16; **H04L-012/12**

International Patent Class (Additional): G06F-009/06; G06F-013/00; G06F-015/00; G11B-023/00

File Segment: EPI

**4/5/41 (Item 26 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013373520

WPI Acc No: 2000-545458/200050

XRPX Acc No: N00-403555

**Web page content tailoring method for use in the displaying of web pages, converts the web page from HTML into XML, before tailoring it to suit a specific client display and then converting it back to HTML**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC ); BRITTON K H (BRIT-I); IMS S D (IMSS-I); TOPOL B B (TOPO-I)

Inventor: BRITTON K H; IMS S D; **TOPOL B B**

Number of Countries: 005 Number of Patents: 008

**Patent Family:**

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2346238	A	20000802	GB 9929939	A	19991220	200050 B
CA 2292336	A1	20000729	CA 2292336	A	19991216	200051

JP 2000222275 A 20000811 JP 200017102 A 20000126 200053  
 KR 2000053638 A 20000825 KR 20003971 A 20000127 200121  
 US 20020059344 A1 20020516 US 99239935 A 19990129 200237  
 KR 346616 B 20020726 KR 20003971 A 20000127 200309  
 US 6535896 B2 20030318 US 99239935 A 19990129 200322  
 GB 2346238 B 20030604 GB 9929939 A 19991220 200345

Priority Applications (No Type Date): US 99239935 A 19990129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2346238	A		16	G06F-017/30	
CA 2292336	A1	E		H04L-012/12	
JP 2000222275	A		14	G06F-012/00	
KR 2000053638	A			G06F-017/00	
US 20020059344	A1			G06F-015/00	
KR 346616	B			G06F-017/00	Previous Publ. patent KR 2000053638
US 6535896	B2			G06F-017/00	
GB 2346238	B			G06F-017/30	

Abstract (Basic): GB 2346238 A

NOVELTY - The web page content tailoring method for a client device consists of receiving a request from the client device for a web page. The first content portion of the web page's HTML format is converted into XML format. The first portion is then tailored to suit the client device display, before being converted back to HTML format. This is then repeated for all other portions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(a) a system for tailoring web pages; and

(b) a computer program product.

USE - For use in the displaying of web pages.

ADVANTAGE - The system allows web page formats to be individually tailored for specific client devices.

pp; 16 DwgNo 0/2

Title Terms: WEB; PAGE; CONTENT; TAILORED; METHOD; DISPLAY; WEB; PAGE; CONVERT; WEB; PAGE; TAILORED; SUIT; SPECIFIC; CLIENT; DISPLAY; CONVERT; BACK

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-015/00; G06F-017/00; G06F-017/30; H04L-012/12

International Patent Class (Additional): G06F-003/14; G06F-013/00;

G06F-017/22; G11B-023/00; H04L-012/16

File Segment: EPI

4/5/42 (Item 27 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts reserv.

012917549 \*\*Image available\*\*

WPI Acc No: 2000-089385/200008

XRPX Acc No: N00-070375

Service provision method for universal personal telecommunications network

Patent Assignee: ALCATEL (COGE ); ALCATEL ALSTHOM CIE GEN ELECTRICITE (COGE )

Inventor: PETERS M J H

Number of Countries: 030 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 969645	A1	20000105	EP 98401676	A	19980703	200008 B
AU 9937955	A	20000120	AU 9937955	A	19990701	200015
CA 2276886	A1	20000103	CA 2276886	A	19990702	200025
CN 1248113	A	20000322	CN 99110138	A	19990702	200032
JP 2000216826	A	20000804	JP 99172924	A	19990618	200042
US 6337981	B1	20020108	US 99340675	A	19990629	200211
US 20020045446	A1	20020418	US 99340675	A	19990629	200228
			US 200126768	A	20011227	

CA 2227120 A H04L-012/56  
US 6163547 A H04J-003/16  
AU 735399 B H04Q-007/20 Previous Publ. patent AU 9853009  
CN 1191457 A H04Q-007/20

Abstract (Basic): EP 859533 A

The mobile telecommunication system includes at least one transceiver station (BTS1) coupled to a mobile terminal (MT) via a radio link and adapted to exchange mobile information (AAL-SDU: MUD, MSI) with a telecommunication controller (TC: BSC1-2; MSC). The mobile information includes a predetermined telecommunication signalling (HOCOM) to be transported to the controller. The transceiver station (BTS1) includes a first mapping and loading device (SART) for mapping the mobile information into first packets (CPS; AAL-PDU) and to load the first packets into second packets (ATM) to be transmitted to the controller. The controller (TC: BSC1-2; MSC) has a second mapping and loading device (SARS1; SARS2) for unloading the first packets from the second packets. Each of the first packets (CPS; AAL-PDU) comprises a payload (PLD1; PLD) and a control part (HD1; TRL).

The first mapping and loading device (SART) of the transceiver station (BTS1) maps the predetermined telecommunication signalling (HOCOM) into a predetermined field (CPS-UII; CPCS-UU) of the control part of the first packets and to map the remainder of the mobile information (AAL-SDU: MUD, MSI) into the payload of the first packets. The second mapping and loading device (SARS1; SARS2) of the controller (TC: BSC1-2; MSC) extracts the predetermined signalling (HOCOM) from the predetermined field of the control part of the first packets.

ADVANTAGE - Reduces complexity of system. Mobile information includes User-to-User indication field CPS-UII or CPCS-UU, respectively, that transparently transports user data and signalling in up-link to Base Station Controller or to Mobile Services switching centre, or, in down-link, to base transceiver station.

Dwg.1/3

Title Terms: MOBILE; TELECOMMUNICATION; SYSTEM; BASE; TRANSCEIVER; STATION; COUPLE; MOBILE; TERMINAL; RADIO; LINK; EXCHANGE; MOBILE; INFORMATION; TELECOMMUNICATION; CONTROL; INFORMATION; CONTAIN; SIGNAL; HAND; COMMAND; TRANSPORT; CONTROL

Derwent Class: W01; W02

International Patent Class (Main): H04J-003/16; H04L-012/56 ; H04Q-007/20; H04Q-007/22; H04Q-011/04

International Patent Class (Additional): H04L-012/28 ; H04Q-007/28; H04Q-007/36

File Segment: EPI

4/5/45 (Item 30 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

010859461 \*\*Image available\*\*

WPI Acc No: 1996-356412/199636

XRPX Acc No: N96-300593

**Transaction message routing in digital communication network - involves defining origin and destination addresses and editing stacked and nested multi-element address specification to allow messages to be launched onto network without full knowledge of destination**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM ); IBM CORP (IBM )

Inventor: BLAKELEY D B; HIND J R ; HOUSEL B C; KINGSTON W A

Number of Countries: 005 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 725523	A2	19960807	EP 95480177	A	19951206	199636 B
US 5563878	A	19961008	US 95369051	A	19950105	199646
JP 8292908	A	19961105	JP 95337586	A	19951225	199703
EP 725523	A3	19970806	EP 95480177	A	19951206	199743
US 5734651	A	19980331	US 95369051	A	19950105	199820
			US 96655343	A	19960529	

JP 3229183	B2	20011112	JP 95337586	A	19951225	200174
EP 725523	B1	20030723	EP 95480177	A	19951206	200356
DE 69531337	E	20030828	DE 631337	A	19951206	200364
			EP 95480177	A	19951206	

Priority Applications (No Type Date): US 95369051 A 19950105; US 96655343 A 19960529

Cited Patents: No-SR.Pub; EP 282198; EP 608653; GB 2268374; US 5105424

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 725523	A2	E	19	H04L-012/56	
Designated States (Regional): DE FR GB					
US 5563878	A		16	H04L-012/56	
JP 8292908	A		18	G06F-012/00	
EP 725523	A3			H04L-012/56	
US 5734651	A		15	H04L-012/56	Cont of application US 95369051 Cont of patent US 5563878
JP 3229183	B2		19	H04L-012/56	Previous Publ. patent JP 8292908
EP 725523	B1	E		H04L-012/56	
Designated States (Regional): DE FR GB					
DE 69531337	E			H04L-012/56	Based on patent EP 725523

Abstract (Basic): EP 725523 A

The method for routing messages through packet communication networks involves defining origin and destination addresses with a stack of nested multi-element address specifications, and editing at least one intermediate node in the networks, the stacked and nested multi-element address specifications.

Pref., each of the multi-element address specifications identifies a node on the network and a user agent on the networks. They also specify arbitrary parameters to the agent on the networks. The process of editing involves popping one of the multi-element address specifications off one of the stacks. A new multi-element address specification is pushed onto one of the stacks.

ADVANTAGE - Allows messages to be launched on networks where originating station does not have full knowledge of destination station. Editing function is under control of edit table which contains specific directions for editing particular NAPS. Permits deferred routing to accommodate link features or congestion and data dependent routing, route dependent data processing and administrative processing at internetwork boundaries.

Dwg.1/6

Title Terms: TRANSACTION; MESSAGE; ROUTE; DIGITAL; COMMUNICATE; NETWORK; DEFINE; ORIGIN; DESTINATION; ADDRESS; EDIT; STACK; NEST; MULTI; ELEMENT; ADDRESS; SPECIFICATION; ALLOW; MESSAGE; LAUNCH; NETWORK; FULL; DESTINATION

Derwent Class: W01

International Patent Class (Main): G06F-012/00; **H04L-012/56**

International Patent Class (Additional): G06F-013/00; H04M-003/42

File Segment: EPI

4/5/46 (Item 31 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009998616 \*\*Image available\*\*

WPI Acc No: 1994-266327/199433

XPX Acc No: N94-209605

**Packet network resource management using sub-nodes within nodes - allows flexibility in control point association with particular sub-node, all control functions being capable of execution therewithin**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DERBY J H; DRAKE J E; DUDLEY J G; GUERIN R; KAPLAN M A; MARIN G A ; **PETERS M L** ; POTTER K H

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 613316	A2	19940831	EP 93480229	A	19931215	199433 B
JP 7007525	A	19950110	JP 93319558	A	19931220	199511
US 5425021	A	19950613	US 9310136	A	19930128	199529
EP 613316	A3	19950412	EP 93480229	A	19931215	199544
US 5483522	A	19960109	US 9310136	A	19930128	199608
			US 94333194	A	19941102	

Priority Applications (No Type Date): US 9310136 A 19930128; US 94333194 A 19941102

Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 204959; US 4864559

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 613316	A2	E 15	H04Q-011/04	
Designated States (Regional): DE FR GB				
JP 7007525	A	13	H04L-012/56	
US 5425021	A	12	H04J-003/24	
US 5483522	A	12	H04J-003/24	Cont of application US 9310136 Cont of patent US 5425021
EP 613316	A3		H04Q-011/04	

Abstract (Basic): EP 613316 A

Within the packet-switching network, limited internal node communication facilities are made externally visible through the topology database by creating sub-nodes connected with intra-node links as subsidiary parts of a node. The sub-nodes contain switching mechanism and associated adapters within the node.

Preferably, intra-node links represent a bandwidth-limited facility such as a cable, channel or bus between two switching mechanisms. The sub-node switching mechanism, on the other hand, has sufficient bandwidth capacity for all connections which it supports, without restricting network traffic throughput.

USE/ADVANTAGE - High-speed packet-switching networks. Allows network nodal control functions, e.g. topology, directory, path selection, bandwidth management and reservation to manage bandwidth-limited internal node communication facilities between multiple switching mechanisms.

Dwg.6/8

Title Terms: PACKET; NETWORK; RESOURCE; MANAGEMENT; SUB; NODE; NODE; ALLOW; FLEXIBLE; CONTROL; POINT; ASSOCIATE; SUB; NODE; CONTROL; FUNCTION; CAPABLE; EXECUTE

Derwent Class: W01

International Patent Class (Main): H04J-003/24; H04L-012/56 ; H04Q-011/04

International Patent Class (Additional): H04L-012/28

File Segment: EPI

4/5/47 (Item 32 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009889374 \*\*Image available\*\*

WPI Acc No: 1994-169290/199421

XRPX Acc No: N94-133303

**Cooperative method for forming and maintaining access groups at LAN-WAN interface - using one access agent within group as leader to communicate with all other access agents , each contg. finite state machine to perform task and maintenance operations**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: DERBY J H; DOERINGER W A; DRAKE J E; DYKEMAN D H; LI L; PETERS M L ; SANDICK H J; VU K V

Number of Countries: 006 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 598674	A1	19940525	EP 93480165	A	19931019	199421 B
CA 2100542	A	19940517	CA 2100542	A	19930714	199430
US 5365523	A	19941115	US 92976826	A	19921116	199445

JP 6350652	A	19941222	JP 93252917	A	19931008	199510
CA 2100542	C	19990216	CA 2100542	A	19930714	199918
EP 598674	B1	20020807	EP 93480165	A	19931019	200259
DE 69332185	E	20020912	DE 632185	A	19931019	200268
			EP 93480165	A	19931019	

Priority Applications (No Type Date): US 92976826 A 19921116

Cited Patents: 02Jnl.Ref; EP 234191; EP 511142

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing	Notes
-----------	------	-----	----	----------	--------	-------

EP 598674	A1	E	31	H04L-012/66		
-----------	----	---	----	-------------	--	--

Designated States (Regional): DE FR GB

CA 2100542	A			H04L-012/66		
------------	---	--	--	-------------	--	--

US 5365523	A		31	H04L-012/46		
------------	---	--	----	-------------	--	--

JP 6350652	A		32	H04L-012/66		
------------	---	--	----	-------------	--	--

CA 2100542	C			H04L-012/66		
------------	---	--	--	-------------	--	--

EP 598674	B1	E		H04L-012/66		
-----------	----	---	--	-------------	--	--

Designated States (Regional): DE FR GB

DE 69332185	E			H04L-012/66	Based on patent EP 598674	
-------------	---	--	--	-------------	---------------------------	--

Abstract (Basic): EP 598674 A

The method involves negotiating leadership of a group of access agents with all other access agents common to the LAN. Conflicts in negotiation are resolved, and each member assumes the role of group leader or the role of a member of the group.

Group operational integrity is maintained after the group has been formed whereby the communication system may manage the access agents as a group. A group is formed into multiple smaller groups when after detecting a break in the group communication integrity, and the integrity is maintained by merging smaller groups into a large group when a bridge is added between the LAN segments.

ADVANTAGE - Reduces wasted communication power at interface between LAN and WAN.

Dwg.1/16

Title Terms: COOPERATE; METHOD; FORMING; MAINTAIN; ACCESS; GROUP; LAN; WAN; INTERFACE; ONE; ACCESS; AGENT; GROUP; LEADER; COMMUNICATE; ACCESS; AGENT; CONTAIN; FINITE; STATE; MACHINE; PERFORMANCE; TASK; MAINTAIN; OPERATE

Derwent Class: W01

International Patent Class (Main): H04L-012/46 ; H04L-012/66

International Patent Class (Additional): H04L-012/28

File Segment: EPI

4/5/48 (Item 33 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009889371 \*\*Image available\*\*

WPI Acc No: 1994-169287/199421

XRPX Acc No: N94-133300

**Packet transmission network specifying node control functions using multi-cast tree routing - uses header routing and copy ID fields for directing message to specified nodes, and for designating control functions to be performed at nodes**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: CIDON I; DERBY J H; DRAKE J E; DUDLEY J G; GOPAL I S; HERVATIC E A; JANNIELLO J P; KAPLAN M A; KESNER B A; KOPERDA F R; MARIN G A; PETERS M L ; POTTER K H; TSIGLER A L; KESNER B

Number of Countries: 015 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 598671	A2	19940525	EP 93480067	A	19930603	199421 B
CA 2100539	A	19940520	CA 2100539	A	19930714	199430
JP 6216942	A	19940805	JP 93267002	A	19931026	199436
TW 235387	A	19941201	TW 94100612	A	19940125	199507
CN 1089420	A	19940713	CN 93114786	A	19931118	199533
EP 598671	A3	19950125	EP 93480067	A	19930603	199539



CA 2100539	C	19990525	CA 2100539	A	19930714	199939
EP 598671	B1	20011212	EP 93480067	A	19930603	200204
DE 69331310	E	20020124	DE 631310	A	19930603	200215
			EP 93480067	A	19930603	
ES 2168093	T3	20020601	EP 93480067	A	19930603	200247

Priority Applications (No Type Date): US 92978609 A 19921119  
 Cited Patents: No-SR.Pub; EP 303830; EP 404339; US 4813038

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 598671	A2	E	17	H04L-012/56	
Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE					
CA 2100539	A			H04L-012/56	
JP 6216942	A		15	H04L-012/56	
TW 235387	A			H04L-012/54	
CN 1089420	A			H04Q-003/12	
EP 598671	A3			H04L-012/56	
CA 2100539	C	E		H04L-012/56	
EP 598671	B1	E		H04L-012/56	
Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE					
DE 69331310	E			H04L-012/56	Based on patent EP 598671
ES 2168093	T3			H04L-012/56	Based on patent EP 598671

Abstract (Basic): EP 598671 A

The network includes several nodes and transmits message packets. Each packet includes a header having a routing field (42) for directing a message to specified nodes. The routing field may contain a multi-cast tree address or multiple labels specifying nodes to receive a message packet.

The header also includes two control bytes (38,40) which designate various control functions to be performed at the specified nodes. Pref. one control byte (38) specifies the routing mode and priority. Pref. the other control byte (40) includes a copy ID field (34) specifying which of one or more control functions are to be performed at a node.

ADVANTAGE - Enables control functions to be distributed among several adaptors of node without needless copying. Processing time minimised. Node operating speed maximised.

Dwg.4/12

Title Terms: PACKET; TRANSMISSION; NETWORK; SPECIFIED; NODE; CONTROL; FUNCTION; MULTI; CAST; TREE; ROUTE; HEADER; ROUTE; COPY; ID; FIELD; DIRECT; MESSAGE; SPECIFIED; NODE; DESIGNATED; CONTROL; FUNCTION; PERFORMANCE; NODE

Derwent Class: W01

International Patent Class (Main): H04L-012/54 ; H04L-012/56 ; H04Q-003/12

International Patent Class (Additional): H04J-003/02; H04L-012/18 ; H04Q-011/04

File Segment: EPI

4/5/49 (Item 34 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009714044 \*\*Image available\*\*

WPI Acc No: 1993-407597/199351

XRPX Acc No: N93-315511

**Multi-cast network communication system - has communication path making up multi-cast tree itself separated from control and administration of network.**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: AUERBACH J S; CHOW C; DRAKE J E; GOPAL P M; HERVATIC E A; KAPLAN M A; PETERS M L ; WARD M J; QUERBACH J S

Number of Countries: 019 Number of Patents: 014

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 575281	A2	19931222	EP 93480060	A	19930519	199351 B
BR 9302034	A	19940111	BR 932034	A	19930524	199406

network - has distributed control for creation, administration and operational mode selection operative in each of network nodes

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )  
Inventor: AUERBACH J S; DRAKE J E; GOPAL P M; HERVATIC E A; KAPLAN M A;  
KUTTEN S; PETERS M L ; WARD M J

Number of Countries: 018 Number of Patents: 013

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 575279	A2	19931222	EP 93480056	A	19930505	199351 B
AU 9338390	A	19931223	AU 9338390	A	19930506	199407
CA 2094410	A	19931219	CA 2094410	A	19930420	199410
TW 223201	A	19940501	TW 93103090	A	19930422	199423
JP 6152593	A	19940531	JP 93135505	A	19930607	199426
AU 659546	B	19950518	AU 9338390	A	19930506	199528
EP 575279	A3	19940817	EP 93480056	A	19930505	199530
CN 1081042	A	19940119	CN 93107296	A	19930614	199712
US 5634011	A	19970527	US 92900647	A	19920618	199727
			US 95517305	A	19950821	
CA 2094410	C	19980505	CA 2094410	A	19930420	199829
KR 9614979	B1	19961023	KR 9311007	A	19930614	199929
EP 575279	B1	20030723	EP 93480056	A	19930505	200356
DE 69333105	E	20030828	DE 633105	A	19930505	200364
			EP 93480056	A	19930505	

Priority Applications (No Type Date): US 92900647 A 19920618; US 95517305 A 19950821

Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 361649

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 575279	A2	E	28	H04L-012/24	
Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE					
AU 9338390	A			H04L-012/24	
CA 2094410	A			H04L-012/56	
TW 223201	A			H04L-029/02	
JP 6152593	A		26	H04L-012/00	
AU 659546	B			H04L-012/24	Previous Publ. patent AU 9338390
EP 575279	A3			H04L-012/24	
CN 1081042	A			H04L-012/56	
US 5634011	A		27	H01H-067/00	Cont of application US 92900647
CA 2094410	C			H04L-012/56	
KR 9614979	B1			H04L-012/28	
EP 575279	B1	E		H04L-012/24	
Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE					
DE 69333105	E			H04L-012/24	Based on patent EP 575279

Abstract (Basic): EP 575279 A

The communications network management system has many interconnected nodes each having a set manager for controlling either creation of, administration or access to a set of users. The set manager maintains a record of the local subscribers. A set manager for each subscriber group is designated as set leader to maintain membership information about all the users in the multicast group.

One of the set managers is designated as the registrar which maintains a list of all the set leaders in the network. The registrar insures that there is only one set leader per user set, answers inquiries about membership and directs inquiries to appropriate set leaders if necessary.

ADVANTAGE - All functions can be carried out by any node. Assume function at new node when failure or partition occurs in network.

Dwg.2A/10

Title Terms: DISTRIBUTE; MANAGEMENT; SYSTEM; COMMUNICATE; NETWORK;  
DISTRIBUTE; CONTROL; CREATION; ADMINISTER; OPERATE; MODE; SELECT; OPERATE  
; NETWORK; NODE

Derwent Class: W01

International Patent Class (Main): H01H-067/00; H04L-012/00 ; H04L-012/24  
; H04L-012/28 ; H04L-012/56 ; H04L-029/02

International Patent Class (Additional): G06F-015/16; H04J-003/16;

H04L-005/22 ; H04L-012/18 ; H04L-012/26  
File Segment: EPI

Set	Items	Description
S1	5012	AU=(HIND, J? OR HIND J? OR PETERS, M? OR PETERS M? OR TOPO- L, B? OR TOPOLOG B?)
S2	0	S1 AND STYLE() SHEET
S3	0	S1 AND KEY() RECOVERY
File	2:INSPEC	1969-2003/Nov W5 (c) 2003 Institution of Electrical Engineers
File	6:NTIS	1964-2003/Dec W1 (c) 2003 NTIS, Intl Cpyrght All Rights Res
File	8:EI Compendex(R)	1970-2003/Nov W5 (c) 2003 Elsevier Eng. Info. Inc.
File	34:SciSearch(R)	Cited Ref Sci 1990-2003/Nov W5 (c) 2003 Inst for Sci Info
File	35:Dissertation Abs Online	1861-2003/Oct (c) 2003 ProQuest Info&Learning
File	65:Inside Conferences	1993-2003/Dec W1 (c) 2003 BLDSC all rts. reserv.
File	92:IHS Intl.Stds.& Specs.	1999/Nov (c) 1999 Information Handling Services
File	94:JICST-EPlus	1985-2003/Dec W1 (c) 2003 Japan Science and Tech Corp(JST)
File	95:TEME-Technology & Management	1989-2003/Nov W4 (c) 2003 FIZ TECHNIK
File	99:Wilson Appl. Sci & Tech Abs	1983-2003/Oct (c) 2003 The HW Wilson Co.
File	103:Energy SciTec	1974-2003/Nov B2 (c) 2003 Contains copyrighted material
File	144:Pascal	1973-2003/Nov W5 (c) 2003 INIST/CNRS
File	202:Info. Sci. & Tech. Abs.	1966-2003/Nov 17 (c) 2003 EBSCO Publishing
File	233:Internet & Personal Comp. Abs.	1981-2003/Jul (c) 2003, EBSCO Pub.
File	239:Mathsci	1940-2003/Jan (c) 2003 American Mathematical Society
File	275:Gale Group Computer DB(TM)	1983-2003/Dec 09 (c) 2003 The Gale Group
File	434:SciSearch(R)	Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	647:CMP Computer Fulltext	1988-2003/Dec W1 (c) 2003 CMP Media, LLC
File	674:Computer News Fulltext	1989-2003/Dec W1 (c) 2003 IDG Communications
File	696:DIALOG Telecom. Newsletters	1995-2003/Dec 09 (c) 2003 The Dialog Corp.

Set	Items	Description
S1	2012	XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY
S2	7451	EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE- RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML OR VCML
S3	135140	STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?
S4	11073	(PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY- PHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT? OR CODE? ? OR CODED)
S5	13	SUN() MICROSYSTEMS
S6	9362	S1 OR S2
S7	9	S6 AND S3 AND S4
S8	0	S5 AND S6
S9	22	S5 OR S7

File 347: JAPIO Oct 1976-2003/Aug (Updated 031202)  
(c) 2003 JPO & JAPIO

File 350: Derwent WPIX 1963-2003/UD,UM &UP=200379  
(c) 2003 Thomson Derwent

9/5/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06858576 \*\*Image available\*\*  
METHOD AND DEVICE FOR DATA DISTRIBUTION AND METHOD AND DEVICE FOR DATA  
RECEPTION

PUB. NO.: 2001-086078 [JP 2001086078 A]  
PUBLISHED: March 30, 2001 (20010330)  
INVENTOR(s): USUDA YUTAKA  
APPLICANT(s): SONY CORP  
APPL. NO.: 11-263761 [JP 99263761]  
FILED: September 17, 1999 (19990917)  
INTL CLASS: H04H-001/00; G06F-013/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To attain excellent distribution of data by incorporating a plurality of pieces of supplied information in response to output attributes into the single distribution data contents and also incorporating the contents identification information showing data contents attributes that is described in a computer language and to be distributed into the distribution data contents.

SOLUTION: A production part 100 produces **style sheets** which prescribe an **XML** instance and its expression format and also source elements that configure the data modules of various types of monomedia of broadcast programs. These source elements are sent to a sending part 200 via a LAN. The part 200 sends the sending data of a contents transmission system 201, a base band control system 202, an AV encoder 203 and a caption inserter 204 to a transmission part 300. The **part 300 encodes** the **XML** instance by using a multimedia encoding part 301 and sends the encoded **XML** instance to a contents transmission part 302. The data transmission contents are equal to an instance, that is described in an **XML** language format and a CPU executes an **XML** engine with respect to an **XML**.

COPYRIGHT: (C)2001,JPO

9/5/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06815674 \*\*Image available\*\*  
I-CODE AND URL CONVERTING MEANS

PUB. NO.: 2001-043167 [JP 2001043167 A]  
PUBLISHED: February 16, 2001 (20010216)  
INVENTOR(s): SUYAMA SEIICHI  
APPLICANT(s): SUYAMA SEIICHI  
APPL. NO.: 11-215969 [JP 99215969]  
FILED: July 29, 1999 (19990729)  
INTL CLASS: G06F-013/00; G06F-015/00; G06F-017/30

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a converting means used by a system which uses a simplified symbol instead of a URL when a client accesses homepages of a company.

SOLUTION: This means converts an i-code composed of a simplified character string into a URL and comprises a client terminal machine 10 equipped with an **i-code** input **part 11**, a conversion instruction generation part 12, and a homepage display part 13 and an i-code/URL conversion server 3 equipped with a Web sever 31, an **i-code** /URL conversion **part 32**, an i-code/URL database 33, and an **HTML document** generation part 34. The client terminal machine 10 and conversion server are used over a public communication line. The i-code has the short character string, so it is easy to remember and can securely and easily be inputted with less

mistakes, thereby saving a communication time. Therefore, homepages of the company can be accessed naturally.

COPYRIGHT: (C)2001,JPO

9/5/4 (Item 4 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

06707695 \*\*Image available\*\*

SYSTEM AND METHOD FOR REGISTERING DATA IN HTML DOCUMENT RETRIEVAL  
SYSTEM AND RECORDING MEDIUM

PUB. NO.: 2000-293527 [JP 2000293527 A]  
PUBLISHED: October 20, 2000 (20001020)  
INVENTOR(s): ISHII HIDEKI  
APPLICANT(s): NEC SOFTWARE CHUGOKU LTD  
APPL. NO.: 11-095403 [JP 9995403]  
FILED: April 01, 1999 (19990401)  
INTL CLASS: G06F-017/30; G06F-012/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To realize efficient data registration in a document retrieval system and to improve the efficiency of retrieval.

SOLUTION: A web robot 20 is stored in an HTML document data 21. A code conversion processing part 11 in a data registration system 10 converts a Japanese character code and a keyword extraction part 12 extracts all nouns as keywords by analyzing the morpheme of an HTML document. A data comparing part 13 compares each keyword included in stored keywords 14 stored in the past with each keyword extracted by the extraction part 12. A registering URL determination part 15 determines a URL and a title to be registered in a document retrieval system 30 and a data registration part 16 registers the URL, the title and keywords extracted by the extraction part 12 in the system 30 and registers these data also in the stored keywords 14 as storing information.

COPYRIGHT: (C)2000,JPO

9/5/5 (Item 5 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

06154623 \*\*Image available\*\*

DOCUMENT INFORMATION MANAGEMENT SYSTEM

PUB. NO.: 11-096166 [JP 11096166 A]  
PUBLISHED: April 09, 1999 (19990409)  
INVENTOR(s): YANO TAKASHI  
TABATA YASUHIRO  
ISHIJIMA TAKASHI  
APPLICANT(s): RICOH CO LTD  
APPL. NO.: 10-052522 [JP 9852522]  
FILED: March 04, 1998 (19980304)  
PRIORITY: 09215869 [JP 979215869], JP (Japan), July 25, 1997 (19970725).  
INTL CLASS: G06F-017/30

#### ABSTRACT

PROBLEM TO BE SOLVED: To enable direct access from a paper document, which has not been made a hypertext, to the digital world and to improve the usability by selecting a desired word from the paper document and giving a selection mark, and reading it in a system and retrieving the document by using the word as a key word.

SOLUTION: A data base means 101 stores document files in advance. A medium form 102 has a document information part where document information is recorded and a bar code information part where

electronic information corresponding to the **document** information is converted into bar code information and recorded. A marking means 103 selects a desired word from the **document** information and gives a selection mark. A read means 104 reads the selection mark and bar code information out of the medium form 102 having been given the selection mark. A retrieval means 104 retrieves a corresponding **document** file from the data base means 101 by using the word given the selection mark as a key word.

COPYRIGHT: (C)1999,JPO

9/5/16 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014433532 \*\*Image available\*\*  
WPI Acc No: 2002-254235/200230  
Related WPI Acc No: 2001-396864  
XRPX Acc No: N02-196335

**Computer program code parallelization for scientific-engineering applications, involves generating global-to-local index variable mapping and synchronization points based on numerical-method class and index variable**

Patent Assignee: UNIV IOWA STATE RES FOUND INC (IOWA )

Inventor: KIM Y; KOTHARI S C; SIMANTA M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6339840	B1	20020115	US 97867079	A	19970602	200230 B

Priority Applications (No Type Date): US 97867079 A 19970602

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6339840	B1	24	G06F-015/16	

Abstract (Basic): US 6339840 B1

NOVELTY - A numerical-method class and index variables in the input code are identified. Synchronization points and a global-to-local index variable mapping are generated, based on the numerical-method class and index variables.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Computer program code parallelizing system;
- (b) Storage medium storing computer program code parallelizing program

USE - For parallelizing of large codes used in scientific and engineering applications including finite difference codes, finite element code, boundary element code using suitable scientific-workstation-class computer such as marketed by **SUN MICROSYSTEMS**, digital equipment corporation, or silicon graphics, incorporated SGI using UNIX or LINUX operating system. Especially for parallelizing the codes of Penn State/National center for atmospheric research (NCAR) MM5 program, which is a fifth generation mesoscale meteorology model.

ADVANTAGE - Facilitates automatic detection of data communication between processors and minimizes number of synchronization points, thus minimizing interprocessor communication overhead.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining computer program code parallelization method.

pp; 24 DwgNo 5/8

Title Terms: COMPUTER; PROGRAM; CODE; SCIENCE; ENGINEERING; APPLY; GENERATE  
; GLOBE; LOCAL; INDEX; VARIABLE; MAP; SYNCHRONISATION; POINT; BASED;  
NUMERIC; METHOD; CLASS; INDEX; VARIABLE

Derwent Class: T01

International Patent Class (Main): G06F-015/16

File Segment: EPI



9/5/17 (Item 12 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014376566 \*\*Image available\*\*  
WPI Acc No: 2002-197269/200226  
XRPX Acc No: N02-149838

**Resource management method for mobile program code wherein a Resource Requirements List is transmitted as part of the authentication certification**

Patent Assignee: UNIV CATHOLIQUE LOUVAIN (UYLO-N); MAS RIBES J (RIBE-I)  
Inventor: MAS RIBES J

Number of Countries: 095 Number of Patents: 005

**Patent Family:**

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1132796	A1	20010912	EP 2000104966	A	20000308	200226 B
AU 200144194	A	20010917	AU 200144194	A	20010306	200226
WO 200167212	A1	20010913	WO 2001EP2505	A	20010306	200226
EP 1290523	A1	20030312	EP 2001917069	A	20010306	200320
			WO 2001EP2505	A	20010306	
US 20030079123	A1	20030424	WO 2001EP2505	A	20010306	200330
			US 2002221418	A	20020909	

Priority Applications (No Type Date): EP 2000104966 A 20000308

**Patent Details:**

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 1132796	A1	E	16 G06F-001/00	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
AU 200144194	A		G06F-001/00	Based on patent WO 200167212
WO 200167212	A1	E	G06F-001/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW				
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW				
EP 1290523	A1	E	G06F-001/00	Based on patent WO 200167212
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR				
US 20030079123	A1		H04L-009/00	

**Abstract (Basic): EP 1132796 A1**

NOVELTY - The mobile program code has an encrypted authentication certificate supplied by the code distributor at the negotiation phase of the code download. Within this certificate, a Resource Requirements List (RRL) is included, detailing all of the system resources required by the program code. The RRL may include named resources such as files or directories, types of resources or even specific hardware models.

DETAILED DESCRIPTION - Additional resource properties such as available commands, quantities such as memory or disk space availability and maximum usage specifications such as network throughput rates can also included.

An INDEPENDENT CLAIM is also included for the mobile program code using the management method.

USE - To manage resource access and requirements of mobile multi-platform program code e.g. Sun Microsystems Java programming language.

ADVANTAGE - This method allows computer programs to be downloaded and installed whilst controlling access to system resources. It also allows the software supplier to ensure the user has the required system resources available before installation.

DESCRIPTION OF DRAWING(S) - The drawing shows block diagram of the RRL bundling process.

pp; 16 DwgNo 1/6

Title Terms: RESOURCE; MANAGEMENT; METHOD; MOBILE; PROGRAM; CODE; RESOURCE;  
REQUIRE; LIST; TRANSMIT; PART; AUTHENTICITY; CERTIFY

Derwent Class: T01; W01  
International Patent Class (Main): G06F-001/00; H04L-009/00  
File Segment: EPI

9/5/18 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014066159 \*\*Image available\*\*  
WPI Acc No: 2001-550372/200162  
XRPX Acc No: N01-434399

**Dataflow algorithm for symbolic computation of lowest upper bound type  
method with dynamic linking capability to verify instructions and support  
lazy loading**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM )  
Inventor: BRACHA G; LIANG S; LINDHOLM T G  
Number of Countries: 029 Number of Patents: 005  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1292526	A	20010425	CN 2000117671	A	20000526	200162 B
EP 1056005	A2	20001129	EP 2000304321	A	20000522	200166
AU 200036437	A	20001130	AU 200036437	A	20000526	200163
CA 2309768	A1	20001127	CA 2309768	A	20000526	200163
JP 2001175487	A	20010629	JP 2000151833	A	20000523	200163

Priority Applications (No Type Date): US 99321228 A 19990527

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CN 1292526	A			G06F-009/45	
EP 1056005	A2 E	38		G06F-009/445	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT					
LI LT LU LV MC MK NL PT RO SE SI					
AU 200036437	A			G06F-009/44	
CA 2309768	A1 E			G06F-009/44	
JP 2001175487	A		93	G06F-009/54	

Abstract (Basic): EP 1056005 A2

NOVELTY - A dynamic linking and loading system includes a network and a computer readable storage medium for storing a module of a computer program. A module is loaded into a module and connected to a network for a processor to determine if the instruction in the module requires a lower upper bound (LUB) class in at least two referenced modules if different to the first module. A constraint for the referenced module is written if information is required in the form of a set of two classes inherits from a specified class.

DETAILED DESCRIPTION - INDEPENDENT CLAIM - An independent claim is included for the computer program product for verifying instructions in a module of a computer program. Also a claim is included for the signal transmission.

USE - An example of a computer architecture that uses dynamic linking is a virtual machine (VM) such as the JAVATM (VM) of **sun Microsystems**, which is implemented in hardware or software and is platform independent.

ADVANTAGE - Write once, run anytime (WORA) characteristics are improved. The behavior of a program with respect to linkage errors is the same on all platforms and implementations. Testability is improved with reduced catch exceptions when linking. Users can determine the presence of modules in a reliable and simple way, e.g. the user can avoid linkage errors due to calls to different modules missing on different version of a run time environment in a list of programs not executed in the program branch by lazy linking.

DESCRIPTION OF DRAWING(S) - The drawing shows a view of a exemplary computer system suitable for carrying out the method and system.

Processing unit (100)  
Disk drives (110a,110b)  
Display (120)  
Keyboard (130)

pp; 38 DwgNo 1/9  
Title Terms: ALGORITHM; SYMBOL; COMPUTATION; LOW; UPPER; BOUND; TYPE;  
METHOD; DYNAMIC; LINK; CAPABLE; VERIFICATION; INSTRUCTION; SUPPORT; LAZY;  
LOAD  
Derwent Class: T01  
International Patent Class (Main): G06F-009/44; G06F-009/445; G06F-009/45;  
G06F-009/54  
International Patent Class (Additional): G06F-009/445  
File Segment: EPI

9/5/19 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013965620 \*\*Image available\*\*  
WPI Acc No: 2001-449834/200148  
XRPX Acc No: N01-332886

**Computer graphic user interface for presentation, selection and access of  
information on user display screen desktop, uses associated user  
configurable sliding panel with object and lookup tables**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM )  
Inventor: CALDER B H; SHANNON W A; THARAKAN G; WONG H B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6175364	B1	20010116	US 97831846	A	19970401	200148 B

Priority Applications (No Type Date): US 97831846 A 19970401  
Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6175364	B1	17	G06F-013/00	

Abstract (Basic): US 6175364 B1

NOVELTY - Monitor display window has associated user configurable sliding panel, which contain Java based applet application programs. User desired named sliding panels, displayed as handles are independently created within main sliding panel after existence determination. Created sliding panel object table gives indexed fields, class names and locations including handles, which is referenced within a lookup table to associate named sliding panels at desired locations.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) A computer readable medium including programmed instructions.
- (2) (2) A graphic user interface display system.

USE - Computer system graphical user interface used in Macintosh and Windows 95 operating systems.

ADVANTAGE - Improved framework for associating components with containers, such as sliding panel containers, providing reduced access times.

DESCRIPTION OF DRAWING(S) - Graphic user interface flow chart for sliding panel component object.

pp; 17 DwgNo 3/11

Title Terms: COMPUTER; GRAPHIC; USER; INTERFACE; PRESENT; SELECT; ACCESS;  
INFORMATION; USER; DISPLAY; SCREEN; ASSOCIATE; USER; CONFIGURATION; SLIDE  
; PANEL; OBJECT; TABLE  
Derwent Class: T01  
International Patent Class (Main): G06F-013/00  
File Segment: EPI

9/5/20 (Item 15 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013706968 \*\*Image available\*\*  
WPI Acc No: 2001-191192/200119  
XRPX Acc No: N01-135907

Executable software generating system for computer network has compiler which converts visual representation of software displayed by graphical user to executable code

Patent Assignee: UNIV GRIFFITH (UYGR-N); CALYTRIX TECHNOLOGIES LTD (CALY-N); DROMEY G (DROM-I); PARR S (PARR-I)

Inventor: DROMEY G; PARR S

Number of Countries: 092 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200060458	A1	20001012	WO 2000AU269	A	20000330	200119 B
AU 200034096	A	20001023	AU 200034096	A	20000330	200119
US 20020095653	A1	20020718	US 2001963069	A	20010925	200254
AU 756348	B	20030109	AU 200034096	A	20000330	200320

Priority Applications (No Type Date): AU 999495 A 19990330

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

WO 200060458	A1	E	34 G06F-009/44	
--------------	----	---	----------------	--

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200034096	A		G06F-009/44	Based on patent WO 200060458
--------------	---	--	-------------	------------------------------

US 20020095653	A1		G06F-009/44	
----------------	----	--	-------------	--

AU 756348	B		G06F-009/44	Previous Publ. patent AU 200034096 Based on patent WO 200060458
-----------	---	--	-------------	--------------------------------------------------------------------

Abstract (Basic): WO 200060458 A1

NOVELTY - The platform independent executable programs and broadcast channels are integrated by graphical user interface to display visual representation of software. A compiler converts the visual representation of software to executable code. The program has input (X) and two outputs (STD-OUT1,STD-OUT2). An INDEPENDENT CLAIM is also included for executable software generating method.

USE - In computer network for generating executable software e.g. COM, DCOM and active X from Microsoft; SOM, DSOM from IBM; Java, JavaBeans and enterprise JavaBeans from sun Microsystems ; CORBA and OMA from open management group.

ADVANTAGE - The component integration is not a programming exercise instead it is reduced to activity in which input-output relationships between components are specified graphically.

DESCRIPTION OF DRAWING(S) - The figure shows the components of executable program generating system.

Outputs (STD-OUT1,STD-OUT2)

Input (X)

pp; 34 DwgNo 3/23

Title Terms: EXECUTE; SOFTWARE; GENERATE; SYSTEM; COMPUTER; NETWORK;

COMPILE; CONVERT; VISUAL; REPRESENT; SOFTWARE; DISPLAY; GRAPHICAL; USER; EXECUTE; CODE

Derwent Class: T01

International Patent Class (Main): G06F-009/44

International Patent Class (Additional): G06F-009/45

File Segment: EPI

9/5/21 (Item 16 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013576410 \*\*Image available\*\*

WPI Acc No: 2001-060617/200107

XRPX Acc No: N01-045412

Universal serial bus based flash memory in computer host, has USB controller to control flash memory module and USB connector based on packet received from USB defined bus, to write and read data to and from module

Patent Assignee: M SYSTEMS FLASH DISK PIONEERS LTD (MSYS-N); FRIEDMAN M M (FRIE-I)

Inventor: BAN A; MORAN D; OGDAN O

Number of Countries: 091 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200060476	A1	20001012	WO 2000US7087	A	20000320	200107 B
AU 200037564	A	20001023	AU 200037564	A	20000320	200107
US 6148354	A	20001114	US 99285706	A	19990405	200107
BR 200006063	A	20010320	BR 20006063	A	20000320	200123
			WO 2000US7087	A	20000320	
EP 1092193	A1	20010418	EP 2000916466	A	20000320	200123
			WO 2000US7087	A	20000320	
CN 1304509	A	20010718	CN 2000800509	A	20000320	200163
KR 2001071332	A	20010728	KR 2000713327	A	20001127	200208
JP 2002541554	W	20021203	JP 2000609899	A	20000320	200309
			WO 2000US7087	A	20000320	

Priority Applications (No Type Date): US 99285706 A 19990405

Patent Details:

Patent No	Kind	Ln	Pg	Main IPC	Filing Notes
WO 200060476	A1	E	28	G06F-013/36	
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
AU 200037564	A			G06F-013/36	Based on patent WO 200060476
US 6148354	A			G06F-012/00	
BR 200006063	A			G06F-013/36	Based on patent WO 200060476
EP 1092193	A1	E		G06F-013/36	Based on patent WO 200060476
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
CN 1304509	A			G06F-013/36	
KR 2001071332	A			G06F-013/36	
JP 2002541554	W		32	G06F-013/10	Based on patent WO 200060476

Abstract (Basic): WO 200060476 A1

NOVELTY - The flash memory module (58) stores data. The universal serial bus (USB) connector is connected to the USB defined bus for sending and receiving packets. The USB controller (56) controls the flash memory module and USB connector, according to packet received from the USB defined bus, so that data is written to and read from the flash memory module.

DETAILED DESCRIPTION - The electrical interface connected to USB connector, receives packets from USB connector as electrical signals. The logical interface connected to interface, translates electrical signals to logic signal. The functional interface receives logic signals such that if logic signals represent USB functional packet, the functional interface sends a USB command to the USB controller according to USB functional packet. The application packet extractor extracts packet from the logic signals. The application command interpreter receives packet and determines command according to one of packet. The determined command is passed to USB controller.

USE - Universal serial bus based flash memory such as EEPROM, EPROM in computer host system. Especially for personal computers (PC) having operating system such as DOS, Windows, OS/2 or linux, Macintosh computers. Also for computers having Java-OS as operating system, graphical work stations such as computer of Sun microsystems and Silicon graphics and other computers having some version of UNIX operating system such as AIX or SOLARIS of Sun microsystems. Also for any other known and available operating system such as Windows CE for embedded systems, including cellular telephones, handheld computational devices, and palmtop computational devices and any other computational device which can be connected to network.

ADVANTAGE - The USB/flash controller is configured to provide USB functionality and compatibility along with common flash operations such

as programming, reading and erasing the flash modules. The host controller uses one of several possible protocols, either standard or proprietary to signal the next command to be performed to USB flash controller, thus the entire device acts as a dynamically attachable/detachable non-volatile storage device for host platform.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of system with flash USB device.

USB controller (56)

Memory module (58)

pp; 28 DwgNo 5/14

Title Terms: UNIVERSAL; SERIAL; BUS; BASED; FLASH; MEMORY; COMPUTER; HOST; CONTROL; CONTROL; FLASH; MEMORY; MODULE; CONNECT; BASED; PACKET; RECEIVE; DEFINE; BUS; WRITING; READ; DATA; MODULE

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-013/10; G06F-013/36

International Patent Class (Additional): G06F-003/06; G06F-003/08

File Segment: EPI

9/5/22 (Item 17 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

010384782

WPI Acc No: 1995-286096/199538

**Distributed processing system for network e.g. UNIX, Sun microsystems (RTM) - in which two computers linked by communication channel process data by exchanging signals between communication processing and job management processing units**

Patent Assignee: NEC CORP (NIDE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7182295	A	19950721	JP 93327137	A	19931224	199538 B

Priority Applications (No Type Date): JP 93327137 A 19931224

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 7182295	A	16	G06F-015/16	

Abstract (Basic): JP 7182295 A

The system includes two computers (1,2) connected through communication channel (3). The initial job conditions of one computer communication processing unit (102) are obtained from an acquisition unit (121). The job management data is then generated in the job management process formation unit (122). The information and job conditions are transmitted by a job initial condition transmitter (123). The previous initial conditions are transmitted through the transmitter to the other computers job management processing unit (103). A communication process waiting unit (124) waits for the outputs of the management processing unit, or the input from the standard file of the communication processing unit, or the end code.

An input data transmitter (126) transmits the data to the management processing unit. A job initial condition receiver (131) receives the data from another computer's communication processor from which the job process formation unit (132) indicates the process execution. The job management process waiting unit (133) waits for the data from the input data transmitter or the end code/output file which is input into the standard file. Then, the data is transmitted to the communication process by the output data transmitter (135). The end code of the job process when received is transmitted to the communication processing unit by the end code transmitter (136).

ADVANTAGE - Eliminates communication bottlenecks. Executes job at high speed. Renders operation transparent and user is not aware of load distribution. Provides for operation in interactive mode. Optimises use of resources.

Dwg.2/13

Title Terms: DISTRIBUTE; PROCESS; SYSTEM; NETWORK; SUN; MICROSYSTEM; RTM;

TWO; COMPUTER; LINK; COMMUNICATE; CHANNEL; PROCESS; DATA; EXCHANGE;  
SIGNAL; COMMUNICATE; PROCESS; JOB; MANAGEMENT; PROCESS; UNIT

Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-009/46

File Segment: EPI

Set	Items	Description
S1	2640	XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -
		OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY
S2	21976	EXTENSIBLE() (MARKUP OR MARK() UP) () LANGUAGE? OR XML OR HYPE-
		RTEXT OR HYPERMEDIA OR (MARKUP OR MARK() UP) () LANGUAGE? OR HTML
		OR VCML
S3	451809	STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?
S4	8246	(PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-
		PHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT? OR CODE? ? OR CODED)
S5	6560	SUN() MICROSYSTEMS
S6	23576	S1 OR S2
S7	7690	S6 (S) S3
S8	878	S1 (S) S3
S9	760	S1 (10N) S3
S10	720	S1 (5N) S3
S11	91	S6 (S) S4
S12	1	S11 (S) S5
S13	16	S6 (5N) S4
S14	17	S12 OR S13

File 348:EUROPEAN PATENTS 1978-2003/Nov W05

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031203,UT=20031127

(c) 2003 WIPO/Univentio



14/5,K/7 (Item 7 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01264392

Method and apparatus for electronic document management  
Verfahren und Gerat fur elektronische Dokumentverwaltung  
Procede et dispositif pour la gestion electronique de documents  
PATENT ASSIGNEE:

Ricoh Company, Ltd., (209037), 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo  
143-8555, (JP), (Applicant designated States: all)

INVENTOR:

Piersol, Kurt, 2882 Sand Hill Road, Suite 115, Menlo Park, CA 94025-7022,  
(US)

LEGAL REPRESENTATIVE:

Schwabe - Sandmair - Marx (100951), Stuntzstrasse 16, 81677 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 1091304 A2 010411 (Basic)

EP 1091304 A3 021002

APPLICATION (CC, No, Date): EP 2000117278 000816;

PRIORITY (CC, No, Date): US 410364 990930

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 1091304 A2

A method and apparatus for managing electronic documents within a network. A series of processes perform electronic document capture, indexing, and searching functions within a networked environment. A graphical web-based user interface is provided to facilitate user interaction with the apparatus.

ABSTRACT WORD COUNT: 42

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010411 A2 Published application without search report

Examination: 010411 A2 Date of request for examination: 20000816

Search Report: 021002 A3 Separate publication of the search report

Examination: 030115 A2 Date of dispatch of the first examination  
report: 20021202

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200115	829
SPEC A	(English)	200115	7704
Total word count - document A			8533
Total word count - document B			0
Total word count - documents A + B			8533

...SPECIFICATION along with their acceptable value types.

Figure 6 illustrates one embodiment of an FMA metadata file in **extensible markup language (XML)**. The **partial metadata code** depicted in Figure 6 is illustrative of what might be produced for a document that was captured...

14/5,K/17 (Item 10 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00749091 \*\*Image available\*\*

METHOD OF AND APPARATUS FOR PROVIDING SECURE COMMUNICATION OF DIGITAL DATA  
BETWEEN DEVICES

SECURISATION DES ECHANGES DE DONNEES NUMERIQUES ENTRE DISPOSITIFS ET  
APPAREIL A CET EFFET

Patent Applicant/Assignee:

CANAL+ SOCIETE ANONYME, 85/89, quai Andre Citroen, F-75711 Paris Cedex 15  
, FR, FR (Residence), FR (Nationality), (For all designated states

except: US)

Patent Applicant/Inventor:

MAILLARD Michel, 42, avenue du Marechal Leclerc, F-28130 Maintenon, FR,  
FR (Residence), FR (Nationality), (Designated only for: US)  
DAUVOIS Jean-Luc, 19, rue Eugene Manuel, F-75116 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)  
DUBLANCHET Frederic, Canal+ Technologies Societe Anonyme, 34, place Raoul  
Dautry, F-75516 Paris Cedex 15, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)  
LEPORINI David, Canal+ Technologies Societe Anonyme, 34, place Raoul  
Dautry, F-75516 Paris Cedex 15, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)

Legal Representative:

COZENS Paul Dennis, Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL  
, GB

Patent and Priority Information (Country, Number, Date):

Patent: WO 200062540 A1 20001019 (WO 0062540)  
Application: WO 2000IB432 20000331 (PCT/WO IB0000432)  
Priority Application: EP 99400901 19990413

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04N-005/913

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 12524

English Abstract

The present invention provides a method of providing secure communication of digital data between devices, said method comprising the steps of communicating from one device an identifier of a device to an independent security module and performing device validation depending on the identity of the received identifier.

French Abstract

La presente invention concerne un procede permettant de securiser les echanges de donnees numeriques entre des dispositifs. En l'occurrence, ce procede consiste a envoyer a un module de securite independant un identificateur a partir d'un dispositif, puis a effectuer la validation du dispositif en tenant compte de l'identite de l'identificateur reçu.

Legal Status (Type, Date, Text)

Publication 20001019 A1 With international search report.

Examination 20001228 Request for preliminary examination prior to end of  
19th month from priority date

Fulltext Availability:

Detailed Description

Detailed Description

... CSS keys, from the ECM.

In step 516, the CSS keys are passed to the standardized security part 66 which encrypts the CSS keys using the session key SK and passes the encrypted CSS keys to the digital TV 14...

Set	Items	Description
S1	8142	PA='SUN MICROSYSTEM INC':PA='SUN MICROSYSTEMS INC'
S2	4652	XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY
S3	29427	EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE- RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML OR VCML
S4	586949	STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?
S5	19319	(PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY- PHER? OR ENCIPHER? OR ENCYIPHER? OR CRYPT? OR CODE? ? OR CODED)
S6	506	S1 AND (S2 OR S3)
S7	23	S1 AND S2
S8	503	S1 AND S3
S9	20	S1 AND S2 AND S3
S10	12	S6 AND S5
S11	381	S6 AND S4
S12	12	S11 AND S5
S13	34	S7 OR S9 OR S10 OR S12
S14	34	S13 AND IC=(G06F? OR H04L?)

File 347: JAPIO Oct 1976-2003/Aug (Updated 031202)  
(c) 2003 JPO & JAPIO

File 348: EUROPEAN PATENTS 1978-2003/Nov W05  
(c) 2003 European Patent Office

File 349: PCT FULLTEXT 1979-2002/UB=20031203, UT=20031127  
(c) 2003 WIPO/Univentio

File 350: Derwent WPIX 1963-2003/UD, UM & UP=200379  
(c) 2003 Thomson Derwent

14/5,K/11 (Item 11 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00900903

Object-oriented system, method and article of manufacture for a client-server session WEB access in an interprise computing framework system

Objektorientiertes System, Verfahren und hergestellter Gegenstand zum Webzugriff mittels einer Client-Server-Sitzung in einem Unternehmens-Datenverarbeitungsrah

Systeme oriente objet, procede et article de fabrication pour une session client-serveur pour acceder au Web dans le cadre d'un systeme d'objets informatiques d

PATENT ASSIGNEE:

SUN MICROSYSTEMS, INC. , (1392732), 2550 Garcia Avenue, Mountain View, California 94043-1100, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE

INVENTOR:

Gish, Sherri L., 822 DeVoto Street, Mountain View, California 94043, (US)

LEGAL REPRESENTATIVE:

Browne, Robin Forsythe, Dr. (55142), Urquhart-Dykes & Lord Tower House Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 822487 A2 980204 (Basic)

APPLICATION (CC, No, Date): EP 97110833 970701;

PRIORITY (CC, No, Date): US 675252 960701

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-009/46

ABSTRACT EP 822487 A2

An interprise computing manager in which an application is composed of a client (front end) program which communicates utilizing a network with a server (back end) program. The client and server programs are loosely coupled and exchange information using the network. The client program is composed of a User Interface (UI) and an object-oriented framework (Presentation Engine (PE) framework). The UI exchanges data messages with the framework. The framework is designed to handle two types of messages: (1) from the UI, and (2) from the server (back end) program via the network. The framework includes a component, the mediator which manages messages coming into and going out of the framework. The system includes software for a client computer, a server computer and a network for connecting the client computer to the server computer which utilize an execution framework code segment configured to couple the server computer and the client computer via the network, by a plurality of client computer code segments resident on the server, each for transmission over the network to a client computer to initiate coupling; and a plurality of server computer code segments resident on the server which execute on the server in response to initiation of coupling via the network with a particular client utilizing the transmitted client computer code segment for communicating via a particular communication protocol. Communication is initiated utilizing the network to acquire characteristics of the client from the network.

ABSTRACT WORD COUNT: 238

LEGAL STATUS (Type, Pub Date, Kind, Text):

Change: 030129 A2 Legal representative(s) changed 20021212

Application: 980204 A2 Published application (A1with Search Report ;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9806	1309
SPEC A	(English)	9806	22731
Total word count - document A			24040
Total word count - document B			0
Total word count - documents A + B			24040

PATENT ASSIGNEE:

**SUN MICROSYSTEMS, INC ...**

INTERNATIONAL PATENT CLASS: **G06F-009/46**

...SPECIFICATION copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** , or the patent disclosure, as it appears in the Patent and Trademark Office.

Field of the Invention...preferred embodiment;

Figure 27 describes the forms of a Presentation Engine, as an abstract Java class, a **template** for development, and an executable component in an application in accordance with a preferred embodiment;

Figure 28 describes the functions developers must fill in using the server program **template** in accordance with a preferred embodiment;

Figure 29 illustrates Server Properties in accordance with a preferred embodiment...

...geometrical designs.

Objects are defined by creating "classes" which are not objects themselves, but which act as **templates** that instruct the compiler how to construct the actual object. A class may, for example, specify the... the design and development effort for software can be achieved. A preferred embodiment of the invention utilizes **HyperText Markup Language (HTML)** to implement **documents** on the Internet together with a general-purpose secure communication protocol for a transport medium between the client and the merchant. HTTP or other protocols could be readily substituted for **HTML** without undue experimentation. Information on these products is available in T. Berners-Lee, D. Connolly, "RFC 1866: **Hypertext Markup Language - 2.0**" (Nov. 1995); and R. Fielding, H. Frystyk, T. Berners-Lee, J. Gettys and J.C. Mogul, "HypertextTransfer Protocol --HTTP/1.1:HTTP Working Group Internet Draft" (May 2, 1996).

**HTML** is a simple data format used to create **hypertext documents** that are portable from one platform to another. **HTML documents** are SGML **documents** with generic semantics that are appropriate for representing information from a wide range of domains. **HTML** has been in use by the World-Wide Web global information initiative since 1990. **HTML** is an application of ISO Standard 8879:1986 Information Processing Text and Office Systems: Standard Generalized **Markup Language (SGML)**.

To date, Web development tools have been limited in their ability to create dynamic Web applications which span from client to server and interoperate with existing computing resources. Until recently, **HTML** has been the dominant technology used in development of Web-based solutions. However, **HTML** has proven to be inadequate in the following areas:

- o Poor performance;
- o Restricted User interface capabilities...

...real-time stock tickers, animated icons, etc.) can be created, and client-side performance is improved. Unlike **HTML** , Java supports the notion of client-side validation, offloading appropriate processing onto the client for improved performance...comply with Sun's Java Application Programming Interface (API) allowing developers to add "interactive content" to Web **documents** (e.g. simple animations, page adornments, basic games, etc.). Applets execute within a Java-compatible browser (e ...

...blocks are called ActiveX Controls, small, fast components that enable developers to embed parts of software in **hypertext markup language (HTML)** pages. ActiveX Controls work with a variety of programming languages including Microsoft Visual C++, Borland Delphi, Microsoft...

...runtime (Java JDK) or JavaOS installed. Application client programs are developed in Java using a null application **template** that contains the necessary Java classes and methods for integration with a Graphical User Interface (GUI). The **template** includes Java classes which will allow the client program to communicate with the server program. Scripts and...

...to create an application front end referred to as a Presentation Engine, hereinafter (PE), from a provided **template**. The PE **template** includes methods (logic in an object) to send messages and their data through a client communication library. Developers modify the **template** to specify the messages and data required for their application. The communication library handles the passing of...administration of its set of applications. The clients use the web to access the servers resources. A **template** is also provided for creating an applet that enables users at client nodes to start applications from...The fourth step is to develop a Presentation Engine front end. Java is utilized for this task. **Templates** and tools are provided to facilitate this task. The detailed tasks associated with facilitating these tasks are...are provided as applications on server nodes in accordance with a preferred embodiment. A Java startup applet **template** is also provided to facilitate development of the applications startup applet.

Presentation Engine Development  
Presentation engine development...

...preferred embodiment. Developing a specific application presentation engine means extending and customizing the basic presentation engine framework **template**. A Presentation Engine (PE) is itself a system with two components: (1) a UI implemented in Java...  
...a developer can link the UI 900 to the UI Adaptor 910.

(2) Extend the PE Framework **Template** (960)

Figure 9 illustrates how the PE Framework 960 architecture is arranged to facilitate two kinds of...of a particular application and specify appropriate maps for views or UI components All of the class **templates** necessary to be extended into a fully functional model are provided The Model data 1600 is utilized...the Java Virtual Machine is present.  
\* Rapid development.

Clients are developed in Java using a null application **template** that contains the necessary Java classes and methods for integration with a GUI and a Communication Library...ICE-T application is to create an application front end, a Java Presentation Engine, from the provided **template**. The Presentation Engine (PE) **template** includes methods to send messages and their data through a client Communication Library. Developers modify the **template** to specify the messages and data required for their application. The Communication Library handles the passing of...

...additional ICE-T files and programs that manage applications on the server. ICE-T also provides a **template** for creating a startup applet that enables users to start applications from a browser. Chapter 3, "Configuring...the Application Manager starts the server program and initiates a network session.

The Application Manager downloads an **HTML** page with a startup applet for the application. When the user runs the startup applet, the Application Manager selects a compiled Presentation Engine and downloads an **HTML** page containing the applet tag for it to the client using HTTP. The compiled Presentation Engine includes...

...The client program consists of:

- \* A GUI built with Java
- \* A Java Presentation Engine built using a **template**

These components, and related classes used by the Presentation Engine, combine to behave as a single client...

...a language that calls C and it must include functions for handling messages from the client. A **template** with these functions is provided, as is a main routine that makes calls to the provided server Communication Library.

ICE-T provides these **templates**, tools, and libraries for developing applications:

- \* pe(underscore) **template**.java

A **template** for a working Presentation Engine.

- \* ICE-T packages (supplementary to the standard Java packages)
- \* server- **template** .c and server(underscore) **template** .cc

Server program **templates** (one each for C and C++) that define and enable message passing to and from the client. The **templates** can be used with existing programs or used as a starting point for developing server programs. These **templates** are analogous to the pe(underscore) **template** used for the client.

- \* ICE-T message data types that work the same on both client and Engine

**template** is pe(underscore) **template** .java. You can find it in the ICE-T application installation directory under **Templates** /C or **Templates** /C++. The file is placed in each of the **Template** subdirectories for convenience. The pe(underscore) **template** is the same in both files.

Figure 27 describes the forms of a Presentation Engine, as an abstract Java class, a **template** for development, and an executable component in an application in accordance with a preferred embodiment.

To create a working Presentation Engine, you copy the pe(underscore) **template** file and make these changes:

- \* Supply your own Presentation Engine name.
- \* Create user interface components or map...

...to implement a createModel() method, described in this chapter. Both options are supported by the pe(underscore) **template** .

#### ICE-T Classes and Packages

The **documentation** for the ICE-T Presentation Engine API is presented in **HTML** form, like the Java API **documentation** , and is accessible from the following URL:

file:// /<ICE-T Installation Directory>/doc/api

where <ICE-T...

...T primitive data types.

#### Working with the ICE-T Directory Structure

Before developing applications, copy the provided **templates** and Makefiles to an application development directory. There are two subdirectories of **templates** .

- \* <ICE-T Installation Directory>/ **Templates** /C
- Contains Example. mk, pe(underscore) **template** . java, and server(underscore) **template** .c.
- \* <ICE-T Installation Directory>/ **Templates** /Cplusplus
- Contains Example .mk, pe(underscore) **template** . java, and server(underscore) **template** . cc.

For example, create an application directory for an application named myAppName in which the server program is written in C++, and copy the **templates** to it:

```
% mkdir myAppNams
```

```
% clo <ICE-T Installation Directory>/ Templates /C++/* <ICE-T  
Installation Directory>/Applications/myAppName/.
```

The ICE-T installation scripts and MakeHierarchy depend on the...

...in detail throughout this section:

1. If you have not done so already, copy one of the **Templates** subdirectories to the Applications directory.

The ICE-T installation directory includes a communication directory for developers to...the file.

3. Create a Presentation Engine class.

Create your own Presentation Engine definition using pe(underscore) **template** .java.

4. Integrate the Presentation Engine with the user interface (GUI).

Create a separate user interface class...

...the GUI with the Presentation Engine by implementing the createUI ( ) method that is found in pe(underscore) **template** .java.

"Working with the ICE-T Directory Structure" describes how to implement `createUI()`.

5. Determine and define...

...modifying server programs to work with clients. In both client and server program cases, ICE-T provides **templates** with methods (Presentation Engine) and functions (server) for registering handlers. Developers provide only the application-specific messages and data.

Creating a Presentation Engine Class

Copy one of the **Templates** subdirectories to the Applications subdirectory. There are two subdirectories, one for C and one for C++. For...

...server program for myAppName is to be written in C, copy all of the files from the **Templates** /C directory:

```
% inkair myAppName
```

```
% cp <ICE-T-Installation Directory>/ Templates /C/*  
<ICE - T Installation Directory>/Applications/myAppName/.
```

For each Presentation Engine you create, modify `pe(underscore) template .java` to declare a class that extends the abstract Java class `PresentationEngine`:

```
public class myPresentationEngine extends PresentationEngine...
```

...if the Presentation Engine class is named `myPresentationEngine`, the file should be named `myPresentationEngine. java`.

`pe(underscore) template . java` contains the class and method declarations that you implement to provide the functionality you want. The...

...`initializeApplication ()` unless your client program requires local initialization before communication is started.

Importing Packages

The `pe(underscore) template` imports the appropriate packages, including these ICE-T packages and standard Java packages:

```
* sunsoft.ice.pe  
* sunsoft...
```

...a Presentation Engine class must have these import statements. Don't delete them from the `pe(underscore) template .`

```
import sunsoft. ice.pe. ;  
import java.net.*;  
import java.io. ;  
import java .applet.*;  
import java.util. *;  
import...
```

...and attach Observer objects to them.

`createModel ()` is optional and is commented out in the `pe(underscore) template .` To use `createModel ()`:

```
* Uncomment the method in the Pe(underscore) template  
* Create Observable data objects to hold data from the server  
* Attach Observers to the data objects, if...as given. The Presentation Engine makes calls to the UI Adaptor to register messages. The Pe(underscore) template includes the necessary methods; developers provide the message bodies as described in the procedures in this chapter  
...
```

...not need to modify `PeUIAdaptor`, but do call methods in it as directed by the `pe(underscore) template .`

Handling Events from the Server

Events from the server program that generate messages for the client can...



...for Updates to the User Interface

To create a handler that updates the user interface, use the **template** to define a class that extends PeUIHandler. PeUIHandler is an abstract class for a handler of messages...

...updating the user interface and for sending messages using the uiAdaptor.

This example from the pe(underscore) **template** shows the definition for a class named SampleUIHandler. The constructor method passes adaptor and uiContainer as arguments...

...for the events that affect the model.

To create a handler that updates the model, use the **template** to define a class that:

- \* Extends PeModelHandler.

PeModelHandler is an abstract class for a handler of messages...

...your Presentation Engine has access to the model class for updates.

This example from the pe(underscore) **template** shows the definition for a class named SampleModelHandler. Use this definition as is, but supply the name...

...in the Presentation Engine by filling in the createMessageHandler () method.

createMessageHandler () is defined in the pe(underscore) **template** to register handlers with either the user interface or the model. Use this method as defined, changing...

...you defined.

Registering Handlers for Updates to the User Interface

This code snippet from the Pe(underscore) **template** illustrates how to register the handler defined in the example in "Creating Handlers for Updates to the...name of the handler in the model. This code is defined for you in the pe(underscore) **template** .

This code snippet illustrates how to register the handler defined in "Creating Handlers for Updates to the...

...provides default shutdown handlers. The shutdown handlers are defined in the PresentationEngine class, not in pre(underscore) **template** . Developers who do not want to accept the default shutdown handling can write their own shutdown handlers...

...any language that can call the C programming language. ICE-T provides both C and C++ language **templates** for handling messages and making calls to the server Communication Library. Use the appropriate **template** to start a new server program in C or C++, or add the **template** functions to an existing server program.

Note - If you have not done so already, copy one of the **Templates** subdirectories to the Application subdirectory. There are two subdirectories, one for C and one for C++. Each directory contains a server(underscore) **template** , one for C and the other for C++.

To enable communication between the server program and the...

...Messages in the Server Program".

- \* Make calls to the ICE-T server Communication Library.

The server program **templates** provide functions for message handling and communication. Developers just supply the application-specific message names and their handlers. For C server programs use server-**template** . C. For C++ programs use server(underscore) **template** .cc. The **templates** are in the ICE-T installation directory under **Templates** /C and **Templates** /C++ respectively.

Each server program **template** calls a default main routine. The default main () routines are provided for convenience. If you choose to ...

...Default main Routine (Optional)".

Figure 28 describes the functions developers must fill in using the server program **template** . All three return integer values of 1 (TRUE) or 0 (FALSE). A return value of 1 (TRUE...

...FALSE) indicates a problem that results in stopping the application. The remaining functions in the server program **templates** can be used as provided.

Figure 29 illustrates Server Properties in accordance with a preferred embodiment.

Handling...

...and employee number (empNumber):

2. Register the message handlers.

Fill in the createMessageHandler ( ) function in the server- **template** to register the handlers with the server Communication Library.

Note that you just use the code in...the Presentation Engine and the server programs. Example.mk is in the ICE-T installation directory under **Templates** /C or **Templates** /C++. These files are copied to the/Applications directory...

To use the makefile, modify it to specify...

...macros for the Presentation Engine source files.

This example specifies the Java files for the Presentation Engine **template** (pe(underscore) **template** .java) and a user interface file named myGui.java. The macros for which you provide values are...

...of the files to those used in your application:

Example.mk specifies files for the server program **template** (server(underscore) **template** ). The macros for which you provide values are shown here in bold type. There is a macro...

...mk) to build a customized Access program for use with ICE-T server applications.

\* Application startup applet **template** (Java)

A **template** for making Java applets that launch ICE-T applications. The **template** is in the ICE-T installation directory under StartApplet. Web server (user must install)  
Supports HTTP connections...

...installation instructions.

Deploying and maintaining ICE-T applications involves these steps:

1. Using a stamp applet and **HTML** pages to launch ICE-T applications
2. Setting up the Web server
3. Customizing (optional) and installing...

...installation scripts for Presentation Engines and server programs

5. Configuring application management files

Using Startup Applets and **HTML** Files

Compiled Presentation Engines can run as applets in a Java-enabled browser. To enable users to launch ICE-T applications from a browser use the named ICE-T **templates** to:

\* Create a startup applet for each application. Use the startAppletDevIR.java **template** .

Using the Startup Applet describes this step.

\* Create a top-level **HTML** file with links to each application. This file serves as a "splash page" identifying the applications available and including links to an **HTML** file for each application. Use splashTemplate. **html** .

"Creating a Top-Level **HTML** File" describes this step.

\* Create an **HTML** file for each application. Use appTemplate. **html** .

"Creating Individual Application **HTML** Files" describes how.

Using the Startup Applet

A startup applet provides a way to launch an ICE...

...the applet in a separate user interface window (developer's choice)

You can use the startAppletDevIR.java **template** to launch the applications you build, or create your own applet. The **template** is completely generalized so that it can be used for any of your applications. You supply the application name in a separate parameter to the applet tag. (See "Creating Individual Application **HTML** Files".)

A complete code listing for startAppletDevIR.java is in Appendix B. By default, the startup applet...

...browser window, open startAppletDevIR.java and follow the instruction in the file:

#### Creating a Top-Level **HTML** File

You need a top-level **HTML** file, or "splash page" to present the list of available applications with links to the application-level **HTML** pages for them. When a user chooses a link, the link takes them to an application-level **HTML** page.

ICE-T provides a default **HTML** file for the "splash page." The file, called splashTemplate.html, is in the ICE-T installation directory under StartApplet. You can use the default file or make...

...a top-level Web page for listing the links to your application Web pages:

1. Copy splashTemplate.html to another file. For example:

```
% cp splashTemplate.html myAppSplashPage.html
```

2. Open the file in an editor.

3. Provide a title for the page and any text...

...about the application(s) listed there.

4. Supply the name and the URL of the application-level **HTML** page for each listed application.

For example, if you used appTemplate.html to create an **HTML** file for an application named MyApplication1:

5. Copy the file to the appropriate location on your Web...

...to the named application:

MyApplication1

when a user chooses this link, the browser loads an application-level **HTML** page with the startup applet for the application.

#### Creating Individual Application **HTML** Files

Think of the application-level **HTML** file as the Presentation Engine startup page. This page contains the startup applet that results in the ...

...to the Access Layer on the server.

To create an application-level Web page:

1. Copy alDiDlTemplate.html to another file. For example:

```
% cp appTemplate.html myAppPage.html
```

2. Open the file in an editor.

3. Include instructions to the user on how to launch...

...startAppletDevIR.java defines a Send button and a class (sendBtn) that handles the user's input. appTemplate.html includes default instructions for using Send. If you want to change the user's interaction with the stamp applet, you would need to change the sendBtn class and the instructions in appTemplate.html.

4. Specify the name of the startup applet.

If you have copied startAiDiDlDevIR.java, given it another...

...the Access parameter.

```
<param name=Access value="Access">
```

Be sure that the file you create from appTemplate.html contains the end applet tag </applet>.

Here are the tags for a minimal HTIVIL file using startAlppletDevIR, an application named "MyApplication1", and the default access program name:

```
< html >
```

```
<blockquote>
```

Please provide Username and Password and press the "Send" button to launch the application.

```
</blockquote>
```

```
<hr...>
```

```
...startAppletDevIR.class" width=400 height=400>
```

```
<param name=AppName value="MyApplication1">
```

```
<param name=Access value="Access">
```

```
</applet>
```

```
</ html >
```

When the user launches the startup applet and sends the user data and the application name to...Layer installation script generates the application configuration file automatically. That configuration is the basis for generating an **HTML** wrapper file in which to download the Presentation Engine. You can accept the defaults and let your application use the generated **HTML** wrapper, or you can customize the application configuration file so that it generates a customized **HTML** file to hold the Presentation Engine. See "Configuring Applications" for more information.

Setting up the Web Server...and client program locations and names in appConfigFile. Using the configuration file, the Application Manager generates an **HTML** wrapper for presenting Presentation Engines as applets in a Web browser execution environment (See "Using Startup Applets and **HTML** Files" for more information about how to use startup applets for ICE-T applications.)

To complete the...

...to a Web Browser you use one of two ways to supply application-specific values in the **HTML** wrapper:

\* Run ice - app- install with the required arguments as described in "Installing the ICE-T Application..."

...peClass).

3. Supply messages to return to the browser if user authentication or application stamp fails.

The **template** contains tags for authentication failure and application startup failure messages.

The appConfigFile contains optional tags for you...

...properties.

cc.default(underscore)apppmgr(underscore)properties.cc is described in "Customizing the Access Layer".

#### Presentation Engine **Template**

ICE-T provides a null application that you can use as a **template** for Presentation Engines. You can find the file for the **template** in the ICE-T application installation directory under / **Templates**  
/pe(underscore) **template** .java.

#### Startup Applet **Template**

startAfalaletDevIR. java is a Java applet that launches ICE-T applications. The file is generalized to run...

...installation directory under/StartApplet. For instructions on how to use

this file, see "Using Startup Applets and HTML Files".

### Server Program Templates

This appendix contains code listings for the following templates :

- \* server(underscore) template .c
- \* default(underscore)main.c
- \* server(underscore) template .cc
- \* default(underscore)main.cc

Chapter 2, "Building Program Components describes the location and use of these templates . See "Handling Messages in the Server Program" and "Modifying the Default main Routine (Optional)" for more information.

### C++ Files

ICE-T provides a server program template and a default main routine for application developers using C++ to develop server programs.

### C++ Server Program Template

Default main for C++

### C Server Program Template

Default mainfbr C

### ICE-T Exceptions Catalog D

ICE-T client program exceptions are caught by the...

...CLAIMS socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

9. The server for a distributed system as recited in claim...

...socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

18. The method as recited in claim 10, wherein authentication information ...socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

27. The computer program embodied on a computer-readable medium for...

14/5,K/18 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00792377 \*\*Image available\*\*

### METHOD AND APPARATUS FOR COMPLETING A FORM

### PROCEDE ET APPAREIL PERMETTANT DE REMPLIR UN FORMULAIRE

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC , 901 San Antonio Road, M/S: UPAL01-521, Palo Alto, CA 94303, US, US (Residence), US (Nationality)

Inventor(s):

DIGIORGIO Rinaldo, 20 Mile Common Road, Easton, CT 06612, US,

UHLER Stephen, Mundell Way, Los Altos, CA 94022, US,

Legal Representative:

MCKAY Philip J (et al) (agent), Gunnison, McKay & Hodgson, L.L.P., 1900 Garden Road, Suite 220, Monterey, CA 93940, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200125873 A2-A3 20010412 (WO 0125873)

Application: WO 2000US27191 20001003 (PCT/WO US0027191)

Priority Application: US 99414402 19991007

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/24**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9497

#### English Abstract

The present invention provides the user with a mechanism for completing a form. When a user issues a request for a form, that request is processed by a rewriting service. In one embodiment of the invention, the rewriting service provides the user with a mechanism for providing data to a form by obtaining data from a data source location. The rewriting service responds to a request for a form by generating a version of the form that contains embedded programs (e.g. applets). The applet elements identify the location of applets configured to obtain data from the data source location. A smart card is an example of a data source location. Access to the smart card may be controlled by the use of an authentication mechanism. The rewritten form is transmitted to a client computer where it utilizes the embedded programs to obtain data from a data source location such as a smart card.

#### French Abstract

L'invention fournit a un utilisateur un mecanisme permettant de remplir un formulaire. Lorsque cet utilisateur emet une demande de formulaire, ladite demande est traitee par un service de reecriture. Selon un mode de realisation, le service de reecriture fournit a l'utilisateur un mecanisme de fourniture de donnees a un formulaire, par obtention desdites donnees a partir d'une implantation de source de donnees. Le service de reecriture repond a une demande de formulaire par generation d'une version de formulaire qui contient des programmes incorpores (par exemple, des mini-applications). Des elements de mini-applications identifient l'implantation de ces mini-applications configurees de facon a obtenir des donnees provenant de l'implantation de source de donnees. Une carte a puce est un exemple d'implantation de source de donnees. L'accès a la carte a puce peut être commandé par un mécanisme d'authentification. Le formulaire reecrit est transmis a un ordinateur de client, ce formulaire utilisant les programmes incorpores pour obtenir des donnees provenant d'une implantation de source de donnees telle qu'une carte a puce.

#### Legal Status (Type, Date, Text)

Publication	20010412	A2 Without international search report and to be republished upon receipt of that report.
Examination	20010823	Request for preliminary examination prior to end of 19th month from priority date
Search Rpt	20020711	Late publication of international search report
Republication	20020711	A3 With international search report.
Search Rpt	20020711	Late publication of international search report
Correction	20021114	Corrected version of Pamphlet: pages 1-28, description, replaced by new pages 1-28; pages 29-35, claims, replaced by new pages 29-35; pages 1/7-7/7, drawings, replaced by new pages 1/7-7/7; due to late transmittal by the receiving Office
Republication	20021114	A3 With international search report.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/24**

Fulltext Availability:

Detailed Description

Detailed Description  
... functionality.

The WWW is a segment of the Internet that utilizes an application layer protocol called the **HyperText** Transfer Protocol (HTTP) to disseminate and to obtain information from users. HTTP is a request/response protocol used with distributed, collaborative, **hypermedia** information systems. In operation, HTTP enables one computer to communicate with another. For example referring now to...phones. Some web browsers can display several different types of files. For example, files written using the **HyperText Markup Language (HTML)**, the JavaScript programming language, the ActiveX programming language, or the Portable Document Format (PDF) may...

...It is also possible to display various other types of files using language such as Standard Generalized **Markup Language (SGML)** or **eXtensible Markup Language (XML)**.

Creating a Web Page.

A form, which provides one or more places for a user to enter...

...and/or programming languages. Most web pages, and as a result most forms, are created using the **HyperText Markup Language** (HTML). The techniques used to create a web page will now be discussed in further detail.

**HTML** is a language that may be used to specify the contents of a web page (e.g. web page 220). An **HTML** description is typically comprised of a set of markup symbols which are described in more detail below. **HTML** file 250 or any type of data file that contains the markup symbols for web page 220...

...to web browser 210. Web browser 210 executing at web client 200 parses the markup symbols in **HTML** file 250 and produces web page 220, which is then displayed, based on the information in **HTML** file 250. Web page 220 may contain text, pictures, or forms comprised of embedded text fields, checkboxes...

...types of data that is to be displayed on the web client using web browser 210. Consequently, **HTML** document 250 defines the web page 220 that is rendered by web browser 210. For example, the...

...markup symbols directs web browser 210 to display a title, a heading, and an image called "image.jpg".

```
< HTML >
<HEAD>
<TITLE> This is a document title </TITLE>
</HEAD>
<BODY>
<H1> This text uses heading level one...
```

```
...com/image.jpg">
</BODY>
</HTML>
```

In the above example, markup symbols (e.g. "<" and ">") indicate where each **HTML** command (e.g. TITLE) begins and ends. An **HTML** command, which is typically surrounded by markup symbols, provides the web browser with

instructions to execute. Markup symbols typically surround an **HTML** command.

The "<" symbol indicates the start of an **HTML** command and the "</" symbol indicates the end of an **HTML** command. Each start or end command has a corresponding ">" to indicate the close of that particular command. Information associated with the **HTML** command may be contained within the **HTML** command's start and end symbols. An **HTML** command is used to by the web browser 210 to determine how to process the block of information associated with the two commands.

In the above example, "<TITLE>", and "</TITLE>" are examples of **HTML** commands surrounded by markup symbols. The "</TITLE>" **HTML** command directs web browser 210 to place the text "This is a document title" in the title bar of web browser 210.

Some **HTML** commands have attribute names associated with the command. For example, **HTML** command "<IMG>", directs web browser 210 to display an image. A "SRC=" attribute identifies the location and...

...the web server located at

"http://www-sun.com."

Embedding a Form into a Web Page

An **HTML** file may also contain **HTML** commands that cause the web browser to render a web page that contains fields for entering data...

...fields the entire web page is sometimes also referred to as a form. As is discussed below, **HTML** 1.0 includes an **HTML** form command that may cause the browser to display data entry fields. A text box, a drop...one form with the same information.

Figure 3 provides an example of, a form created using the **HTML** definition language. Code block 310 contains **HTML** command examples. When a document comprising code block 310 is transmitted to web browser 300 executing on...

...330, it causes form 305 to be displayed. Web browser 300 displays form 305 by parsing the **HTML** commands contained in code block 310 and then using the information obtained to format form 305. Once...

...block 310 indicates the beginning of a form. Once the initial FORM command is placed into the **HTML** document other **HTML** commands may be entered between the initial FORM command and the closing FORM command (e.g. </FORM...

...box and a checkbox.

```
<INPUT TYPE="text" NAME="user-name">
<INPUT TYPE="checkbox" NAME="user
item1">
```

The **HTML** tags and text contained in code block 310, for example, create form 305 when displayed using web...execute the following shell script in response to a request 410.

```
#!/bin/sh
echo Content-type: text/ html
echo Set-cookie: FooBar=foo; expires=Wednesday,
I 0 02 99 12:00:00 GMT
echo
echo...
```

...allows 1.5 web server 450 to read the HTTP cookie.

```
#!/bin/sh
```



echo Content-type: text/ html

echo

echo The data supplied here was obtained from a

cookie:<P>

echo \$HTTP-COOKIE

Once cookie...the location

of an executable program. In one embodiment of the invention, this is accomplished by replacing XML elements (e.g. tags) that are inserted into the requested form in a standardized format with APPLETT...

...identify the location of an executable applet program. This enables browsers that are not capable of parsing XML to utilize the advantages of the present invention. The rewriting service can replace elements of one type...

...of a second

type. For example, any of the elements contained in a form (e.g. an HTML

document) may be replaced with APPLETT elements. FORM tags or INPUT tags, for example, may also be...using a variety of different computer programming languages. The invention contemplates the use of forms created

using HyperText Markup Language ( HTML ), eXtensible Markup Language

( XML ), Standardized General Markup Language (SGML), JavaScript, the Java

programming language, or any other programming language capable of generating a document that...

...generate a form. For

example, the NGLayout engine which is based on open Internet standards such

as HTML 4.0, CSS 1/2, XML 1.0, and the Document Object Model can be embedded into various execution environments and used to...embedded code configured to interact with card server 519. The rewriting service, for example,

may replace existing HTML FORM elements with APPLETT elements and thereby

provide a way for client computer 500 to obtain applets...

...referred to as a requestor.

I 0 In one embodiment of the invention, the requested form contains XML tags embedded into it. However, the form may also contain data written in other programming languages such as HTML , SGML, or any other language compatible with the protocols utilized to transmit data across a computer network...of an executable program. In one embodiment of the I 0

invention, this is accomplished by replacing XML elements (e.g. tags) that are inserted into the requested form in a standardized format with APPLETT...

...of a second

type. For example, any of the elements contained in a form (e.g. an HTML

1 5 document) may be replaced with APPLETT elements. FORM tags or INPUT tags, for example, may...

...client computer) for display. At this point, the applets referred to in the APPLETT elements may execute.

Extensible Markup Language ( XML ) is a technology that provides a way

to separate the value of the data from the presentation of the data. The present invention also works with XML . Using XML the HTML portion of the form can be populated with XML tags.

The Applet

An applet is a small computer program configured to perform one or

more predefined...

14/5,K/19 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00765097 \*\*Image available\*\*

**A METHOD FOR CACHING XML DOCUMENTS VIEWABLE ON DEVICES WITH DIFFERENT DISPLAYS**

**PROCEDE DE MISE EN MEMOIRE CACHE DE DOCUMENTS XML POUVANT ETRE VISUALISES SUR DES DISPOSITIFS POURVUS DE DIFFERENTS AFFICHAGES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**, M/S UPAL01-521, 901 San Antonio Road, Palo Alto, CA 94303, US, US (Residence), US (Nationality)

Inventor(s):

AYYAGARI Venkata S, 175 Calvert Drive, #B201, Cupertino, CA 95014, US,  
KUZNETSOV Polina, 18361 Vanderbilt Drive, Saratoga, CA 95070, US,  
VALCINALP Lutfiye Umit, 1 Debbie Lane, Belmont, CA 94002, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200077668 A2-A3 20001221 (WO 0077668)

Application: WO 2000US16206 20000614 (PCT/WO US0016206)

Priority Application: US 99138685 19990614

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 5171

**English Abstract**

Systems and methods consistent with this invention provide for efficient processing, caching and routing of **XML** documents through the use of a proxy server. The proxy server is coupled to at least one client computer and a plurality of remote servers on the Internet. The proxy server is adapted in this preferred embodiment to receive a document request in the form of a uniform resource locator (URL) from a client computer and to determine whether the document is an unprocessed **XML** document. If the document is an unprocessed **XML** document, the proxy server is further adapted to search a local cache for a processed version of the document, and to transmit the processed document to the requesting client. In the event the document is not found in local storage, the proxy server is adapted to process the **XML** document, route it to the client and then store the file in local storage in anticipation of subsequent requests for the same document.

**French Abstract**

L'invention concerne des systemes et des procedes servant au traitement, a la mise en memoire et a l'acheminement efficaces de documents **XML** au moyen d'un serveur de procuration. Ledit serveur est couple a au moins un ordinateur client et a plusieurs serveurs a distance sur Internet. Dans ce mode de realisation prefere, le serveur de procuration est adapte pour recevoir une demande de document sous forme de localisateur de ressources universel (URL) d'un ordinateur client, et pour determiner si le document

est un document **XML** non traite. Si le document est un document **XML** non traite, le serveur de procuration est egalement adapte pour rechercher une memoire cache locale pour une version traitee du document, puis transmettre le document traite au client en faisant la demande. Au cas ou le document ne serait pas trouve en memoire locale, le serveur de procuration est adapte pour traiter le document **XML**, l'acheminer vers le client, puis stocker le fichier en memoire locale en prevision de demandes ulterieures du meme document.

Legal Status (Type, Date, Text)

Publication 20001221 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010315 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20021212 Late publication of international search report  
Republication 20021212 A3 With international search report.  
Republication 20021212 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

**A METHOD FOR CACHING XML DOCUMENTS VIEWABLE ON DEVICES WITH DIFFERENT DISPLAYS**

**PROCEDE DE MISE EN MEMOIRE CACHE DE DOCUMENTS XML POUVANT ETRE VISUALISES SUR DES DISPOSITIFS POURVUS DE DIFFERENTS AFFICHAGES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Claims

English Abstract

Systems and methods consistent with this invention provide for efficient processing, caching and routing of **XML** documents through the use of a proxy server. The proxy server is coupled to at least one...

...uniform resource locator (URL) from a client computer and to determine whether the document is an unprocessed **XML** document. If the document is an unprocessed **XML** document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local storage, the proxy server is adapted to process the **XML** document, route it to the client and then store the file in local storage in anticipation of...

French Abstract

...des procedes servant au traitement, a la mise en memoire et a l'acheminement efficaces de documents **XML** au moyen d'un serveur de procuration. Ledit serveur est couple a au moins un ordinateur client...

...de ressources universel (URL) d'un ordinateur client, et pour determiner si le document est un document **XML** non traite. Si le document est un document **XML** non traite, le serveur de procuration est egalement adapte pour rechercher une memoire cache locale pour une...

...ne serait pas trouve en memoire locale, le serveur de procuration est adapte pour traiter le document **XML**, l'acheminer vers le client, puis stocker le fichier en memoire locale en prevision de demandes ulterieures  
...

Detailed Description

... U.S. Provisional Application No. 60/13 8,685, entitled "Method and System for Offloading Processing of **XML** Documents to a Proxy Server" filed June 14, 1999, bearing attorney docket no. 06502  
Field of the...

...invention relates to a proxy server caching mechanism that provides a

method for retrieving, processing and storing **XML** documents 1 0 for access by an end user.

Description of the Prior Art  
Computers need to...

...on software to collect, process and disseminate data to its network users. Shortly after its inception, the **Hypertext Markup Language** (**HTML**) became the Web's de facto **markup language** with a set of symbols or codes that tell a Web browser how to display a Web page's content. **HTML** gained widespread popularity by providing an outstanding mechanism to deliver simple documents over the Web. It makes surfing the Web so simple, most people can effectively use it with little or no training. Although **HTML** is the most successful electronic-publishing language ever invented, it is superficial. In essence, it describes how...

...images and push-buttons on a page, but its lack of structure creates significant barriers to using **HTML** for applications beyond simple browsing. For example, more and more people are trying to configure their Web...

...and additions have been made to the suite of software systems operating on the Internet to make **HTML** sufficiently functional. Functionality is often added in 30 **HTML** documents using Java, JavaScript, and Common Gateway Interface (CGI) programs. Unfortunately, adding functionality in this way obscures...

...this flow of incessant change, a working group of the W3 C developed a new kind of **markup language** now known as the **Extensible Markup Language** (**XML**). **XML** addresses many of **HTML**'s limitations, by creating a whole new way to approach how Web sites are structured and designed...

...that content is formatted or presented, and the ways links between elements operate) may be expressed. An **XML** document is composed of data embedded within markup tags. These tags are similar to those used in **HTML**, except that the **XML** tags may be self-defined. In other etc. The markup describes how the lines should be displayed (<B> Bold, <P> Paragraph Break, <BR> Line Break). When the **HTML** is processed by the browser, no semantics can be inferred. Consequently, the computer has no understanding of...

...30 information being rendered and therefore cannot provide meaningful insight into its contents.

Now consider a possible **XML** representation of the same information that conveys the relationship between various data objects. In the **XML** version below, the employee is described by a name, an email address, phone and fax numbers, a location, and an address. Note that each conceptual piece of information is represented by its own **XML** element, such as <EMPLOYEE>, <NAME>, and <ADDRESS>.

```
<EMPLOYEE>
<NAME>
<FIRST'>Venkata</FIRST>
<MIDDLE> S</MIDDLE>
<LAST>Ayyagari...
...201 </MAILSTOP>
<CITY>Palo Alto</CITY>
<STATE>CA</STATE>
<ZIP>94303</ZIP>
</ADDRESS>
</EMPLOYEE>
```

The advantage of **XML** in this example is that it preserves the semantics and structure of the data in a hierarchical...

...consists of first, middle, and last components, a location contains a building and a room object, etc.

**XML** representations, in further contrast to **HTML**, do not contain a description of how to display the content. **XML** instead stores the rendering (e.g., fonts, colors, leading, margins, typefaces, and other aspects of style) in an **Extensible Stylesheet Language (XSL)** document called a "stylesheet." Separating the functionality in this way allows publishers, who would often like to...

...publication and then pour it into myriad forms, both printed and electronic. Further complicating the differences between **XML** and **HTML** is the fact that a stylesheet can be associated with a client and/or a server. In other words, a server can apply a particular stylesheet to an **XML** document and then transmit the document to a client computer that also applies its own stylesheet to the document. Having an **XSL** processor on the server side means that one can make use of the flexibility and power of **XML** without having to worry about whether a particular client provides **XSL**. However, in order to take full advantage of **XML** and **XSL**, a scenario where the rendering occurs on the client side is most appropriate. Having the server send **XML** data in conjunction with **XSL** stylesheets to a client allows that client to use different stylesheets based on user preferences and the like, without having to refer back to the **XSL** stylesheet stored on the remote server. Having the client send out **XML** and **XSL** provides other benefits as well. A user is able to use a stylesheet that the server does not know about. This allows for full customization of renderings based on a user's needs. Also, **XML** on the client side allows the client to use the same data and feed it into a...

...yet another one, working on the same data, for preparing high-quality printouts. Stylesheets can also take **XML** documents and render them into multi-color, multi-font documents, braille, audible speech or any format desired simply by altering the associated stylesheet. Similar alterations to **HTML** documents could not be done without significant alterations to the underlying **HTML** program. Experts in the field believe that the change from **HTML** to **XML** has the potential to extend the Internet beyond mere information delivery to many other kinds of unimaginable human activity.

Thus, for its users, the **XML**-powered Web will be faster, friendlier and a better place to do business. Referring back to the previous example, it is obvious that a search for StN Microsystems employees using the **XML** document would be much quicker, and more accurate from a similar search of the **HTML** document. Web site designers, on the other hand, will find it more demanding. Battalions of programmers will be needed to exploit new **XML** languages to their fullest. Future Web designers will need to be versed not just in the production...

...hyperlink structures and stylesheets. Web clients correspondingly will need to possess more processing power to read an **XML** document, retrieve the appropriate stylesheet, and use it to sort and format the information on the screen...

...Web servers will become more efficient and less burdened due to the organization and efficiencies provided by **XML**, it is equally clear that the current configuration of Web clients could quickly become inundated by the multiple file access operations necessary to process a single **XML** document. This reality is particularly true with respect to "thin clients" like personal data assistants (PDAs), embedded...

...There is a need therefore for an apparatus and method that minimizes unnecessary network traffic; provides **XML** processing capability to clients not otherwise capable of such processing; optimizes processing of **XML** documents on the Internet; and prevents redundant processing of **XML** documents.

## Summary of the Invention

Systems and methods consistent with this invention provide for efficient processing, caching and routing of XML documents through the use of a proxy server.

The proxy server interfaces with at least one client...

...receive the requested document from the remote server, and to determine whether the document is an unprocessed XML document. If the document is an unprocessed XML document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local storage, the proxy server is adapted to process the XML document, route it to the client and then store the file in local storage in anticipation of...

...subject invention, the proxy server simply monitors traffic destined for a client. When it identifies an unprocessed XML document being routed to the client, the proxy server searches a local cache for a processed version of the XML document, and routes the processed document to the client, if a processed version was found. In the...

...document is not found in local storage, again the proxy server is adapted to process the XML document, route it to the client and then store the file in local storage in anticipation of...

...block diagram of the client computer of Figure 1;  
Figure 3 is a block diagram of the XML proxy server of Figure 1;  
Figure 4 is a block diagram of the remote server of Figure...

...receive the requested document from the remote server, and to determine whether the document is an unprocessed XML document.

If the document is an unprocessed XML document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local cache, the proxy server is adapted to process the XML document, route it to the client computer and then store the processed XML document in the server's local cache.

Referring first to FIG. 1, an XML proxy network system 10 is comprised of a plurality of interconnected computers and microprocessors hosting a plurality...

...be comprised of Pentium™ based microprocessors operating on Windows/NT, UNIX and/or Windows/CE operating systems. XML proxy network 10 includes client devices 100, an XML proxy server 200, and a plurality of remote server computers 300. The devices and computers, as shown...

...cable interfaces. More specifically, client devices 100 are connected to network 20 via cable interface 30, XML proxy server 200 is coupled to network 20 via cable interface 40, and remote server computers 300...

...cable 30 for providing connectivity between client computer 100 and network 20.

A detailed diagram of XML proxy server 200 is shown in FIG. 3. As with client devices 100, XML proxy server 200 is comprised of a CPU 201, a memory 202, a display adapter 206...

...storage unit 215, and a communications adapter 220. Memory 202 includes an operating system 230 and an XML processor program 232. As shown, the various components of each XML proxy server 200 communicate through a system bus 213 or similar architecture. Also, communications adaptor 220 is coupled to network interface cable 40 for providing connectivity between XML proxy server 200 and network 20.

A detailed diagram of remote server computer 300 is shown in...

...shown, remote server computer 300 is comprised of the same hardware components as client computer 100 and XML proxy server 200. In addition, stored in memory 302 is the Internet content 332 associated with remote server computer 300.

Referring now to FIG. 5, there is shown exemplary steps of XML processor program 232 for implementing the method for processing and routing XML documents in system 10 in accordance with an implementation of the present invention. Note that in this description, in order to facilitate explanation, the XML proxy server 200 is generally discussed as if it were a single device, and functions provided by the XML proxy server 200 are generally discussed as being performed by such single device.

However, XML proxy server 200 may actually comprise multiple physical and logical devices connected in a distributed architecture, and the various functions discussed below which are provided by XML proxy server 200 may actually be distributed among multiple server devices. As shown in FIG. 5, a user action in the form of a uniform resource locator (URL) is received at step 405. The XML proxy server 200 decodes the received URL and then ascertains whether the document is an XML document (step 410). For a web page this can be done by examining the URL for a reference to "XML". For a mail message this can be done by examining the multipurpose Internet mail extension (MIME) for a reference to "XML". MIME refers to an official Internet standard that specifies how messages must be formatted so that they can be exchanged between different email systems. "Text/xml" and "application/xml" are two media types that enable the exchange of XML documents with various email systems. If XML proxy server 200 determines that the document is an XML document, processing flows to step 415, otherwise processing flows to step 455. In step 415, XML proxy server 200 determines whether the document has been previously retrieved by the same or a different...

...is the document cached?) If the document is cached, processing flows to step 430 and the XML document is retrieved from the local cache 215 of XML proxy server 200. Processing then flows to step 455 and the proxy server 200 routes the document...

...flows to step 425 where the remote server 300 identifies the requested document, and routes it to XML proxy server 200. Processing flows from step 425 to step 435 where XML proxy server 200 locates and retrieves the document's stylesheet. Next, XML proxy server 200 retrieves client computer's I 00 stylesheet in step 440. Processing then flows to step 445 where XML proxy server 200 applies any stylesheets to the document. Next, in step 450, XML proxy server 200 stores the processed document in local cache 215. In step 455 the document is...

...flowchart of an alternate implementation of the process used by proxy server 200 for processing requests for XML documents. In this implementation the XML proxy server 200 does not receive document requests from client computers I 00. Instead, XML proxy server 200 simply monitors document flow to client computer I 00 to determine whether a document is an XML document and then either routes a previously stored document to the client computer I 00 or performs processing on the unprocessed XML document before routing it to the client computer I 00. As shown in step 505, the process ...

...request for a document directly to the appropriate remote server 300. In step 510, proxy server 200 receives the document from the remote server 300, and in step 520, XML proxy server 200 ascertains whether the document is an XML document. As in the case of the preferred embodiment, XML proxy server 200 performs this step by examining the URL. If XML proxy server 200 determines that the document is an XML document, processing flows to step 525, otherwise processing flows to step 555. In step 525, XML proxy server 200 determines whether the document has been cached. If

the document is cached, processing flows to step 530 and the **XML** document is retrieved from the local cache 215 of **XML** proxy server 200 and processing then flows to step 555. If the document has not been cached, processing flows from step 525 to step 535 where **XML** proxy server 200 locates and retrieves the document's stylesheet. Next, **XML** proxy server 200 retrieves client computer's I 00 stylesheet in step 540. Processing then flows to step 545 where **XML** proxy server 200 applies one or both stylesheets to the document. Next, in step 550, **XML** proxy server 200 stores the processed document in local cache 215. In step 555 the document is...

#### Claim

... in local cache, further comprises the step of ascertaining whether the document is written in a second **markup language**, wherein said second **markup language** is a processed version of said first **markup language**.

4 The method of claim 1, wherein the step of processing the unprocessed document in accordance with...

...associated with the unprocessed document, further comprises the step of converting the unprocessed document from a first **markup language** to a second **markup language**.

5 . The method of claim 1, wherein said second **markup language** is the **extensible markup language (XML)**.

6 A method for processing content requests in a network having at least one content provider having...

...version of the document is located in local cache, further comprises the step of  
ascertaining whether the document is written in a second **markup language**, wherein said second **markup language** is a processed version of said first **markup language**.

9 The method of claim 6, wherein the step of processing the unprocessed document in accordance with predetermined instructions associated with the unprocessed document, further comprises the step of converting the unprocessed document from a first **markup language** to a second **markup language**.

10 An Internet Proxy server comprising:  
a memory having program instructions; and  
a processor configured to use...

...in local cache, further comprises the instruction to ascertain whether the document is written in a second **markup language**, wherein said second **markup language** is a processed version of said first **markup language**.

13 The server of claim 10, wherein the instruction to process the unprocessed document in accordance...

...associated with the unprocessed document, further comprises the instruction to convert the unprocessed document from a first **markup language** to a second **markup language**.

14 The server of claim 10, wherein said second **markup language** is the **extensible markup language (XML)**.

15 An Internet Proxy server comprising:  
a memory having program instructions; and  
a processor configured to use...in local cache, further comprises the step to ascertain whether the document is written in a second **markup language**, wherein said second **markup language** is a processed version of said first **markup language**.



18 The method of claim 15, wherein the instruction to process the unprocessed document in accordance with...

...associated with the unprocessed document, further comprises the instruction to convert the unprocessed document from a first **markup language** to a second **markup language**.

19 A data processing system for processing content requests in a network having at least one content...

...client.

/8  
Remote Server Remote Server Remote Server  
A k  
300 300 300  
50 @@ 50  
40  
NETWORK **XML**  
Proxy  
20  
200  
30 -j-@ 30 30  
1  
Client Client Client  
100 100 100  
10  
FIGn 1...

...8

tart  
Get User Action 405  
IF  
410  
N roxy e eirm nes t  
equested Docu  
an **XML** Docu  
415  
s N  
age  
Cached?  
IF  
Proxy Routes Request to 420  
430 Appropriate  
Retrieve Document From...

...505

Appropriate Server  
IF  
510  
Proxy Receives Document  
From Remote Server  
520  
Is the  
N Document  
a **XML**  
Document?  
25  
s N  
Page  
Cached?  
530  
Retrieve Docurn  
Local Stora  
FIG. 6a  
FIG. 6b  
FIG. 6a...

14/5,K/20 (Item 9 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00760522 \*\*Image available\*\*

**TRANSFORMATION REGISTRY SERVICE FOR CONTENT TRANSFORMATION**

**SERVICE D'ENREGISTREMENT DE TRANSFORMATION POUR TRANSFORMATION DE CONTENU**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**, 901 San Antonio Road, MS PAL01-521, Palo Alto, CA  
94303, US, US (Residence), US (Nationality)

Inventor(s):

YALCINALP Lutfiye Umit, 1 Debbie Lane, Belmont, CA 94002, US,  
KUZNETSOV Polina, 18361 Vanderbilt Drive, Saratoga, CA 95070, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner,  
L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200073941 A2-A3 20001207 (WO 0073941)

Application: WO 2000US14602 20000530 (PCT/WO US0014602)

Priority Application: US 99136764 19990528

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14160

**English Abstract**

Methods and systems consistent with the present invention solve the inherent problems with existing **XSL** transformation systems by providing a transformation registry service that serves as a **XSL** transformation repository. The **XSL** transformation service enables **XSL** transformations in applications to deliver **XML** documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and **XSL** transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a **XML** document from an application, the application may query the transformation registry service for an appropriate **XSL** transformation for the client and its configuration. The transformation may then be applied to the **XML** document and the transformed **XML** document may be delivered to the requesting client.

**French Abstract**

Cette invention concerne des procedes et des systemes qui permettent de resoudre les problemes inherents aux systemes de transformations **XSL**, et qui offrent un systeme d'enregistrement de transformations servant de depot des transformations **XSL**. Le service de transformations **XSL** permet aux transformations **XSL** dans des applications d'acheminer des documents **XSL** a divers clients. Plus precisement, le service d'enregistrement des transformations tient a jour des mappages pour les applications, les clients et les configurations des clients. Les configurations des clients sont definies en fonction d'une application et de transformations **XSL**. Les configurations de clients permettent egalement aux applications d'appliquer ou d'etendre les transformations.

Chaque fois qu'un client demande un document **XML** d'une application, l'application peut se renseigner aupres du service d'enregistrement de transformations afin de trouver une transformation **XSL** qui convienne au client et a sa configuration. La transformation peut ensuite etre appliquee au document **XML** , et le document **XML** transforme est achemine jusqu'au client demandeur.

Legal Status (Type, Date, Text)

Publication 20001207 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010222 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20020711 Late publication of international search report  
Republication 20020711 A3 With international search report.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description  
Claims

English Abstract

Methods and systems consistent with the present invention solve the inherent problems with existing **XSL** transformation systems by providing a transformation registry service that serves as a **XSL** transformation repository. The **XSL** transformation service enables **XSL** transformations in applications to deliver **XML** documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and **XSL** transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a **XML** document from an application, the application may query the transformation registry service for an appropriate **XSL** transformation for the client and its configuration. The transformation may then be applied to the **XML** document and the transformed **XML** document may be delivered to the requesting client.

French Abstract

...concerne des procedes et des systemes qui permettent de resoudre les problemes inherents aux systemes de transformations **XSL** , et qui offrent un systeme d'enregistrement de transformations servant de depot des transformations **XSL** . Le service de transformations **XSL** permet aux transformations **XSL** dans des applications d'acheminer des documents **XSL** a divers clients. Plus precisement, le service d'enregistrement des transformations tient a jour des mappages pour...

...configurations des clients. Les configurations des clients sont definies en fonction d'une application et de transformations **XSL** . Les configurations de clients permettent egalement aux applications d'appliquer ou d'etendre les transformations. Chaque fois qu'un client demande un document **XML** d'une application, l'application peut se renseigner aupres du service d'enregistrement de transformations afin de trouver une transformation **XSL** qui convienne au client et a sa configuration. La transformation peut ensuite etre appliquee au document **XML** , et le document **XML** transforme est achemine jusqu'au client demandeur.

Detailed Description

... relates generally to data processing systems and, more particularly, to content transformation by using Extensible Style Language ( **XSL** ) stylesheets

B. Description of the Related Art

The Internet has been hailed the marketplace of the future...

...that reside on Internet (Web) servers. Web clients and Web servers

communicate using a conventional protocol called " **HyperText** Transfer Protocol" (HTTP).

In operation, a browser opens a connection to a server and initiates a request...

...Locator (URL). The server delivers the requested document, typically in a standard coded format such as the " **HyperText Markup Language** " ( **HTML** ) format. The **HTML** formatting language incorporates text and graphics into a document by using "tags." **HTML** tags are codes that identify elements in a document, such as headings or fonts, for the purpose of formatting information in the **HTML** document. For example, the tag "<BOLD>" indicates that the text should appear bold face. In **HTML** both the tag semantics and the tag set are fixed. An <h1> tag is always a first...

...is meaningless.

The World Wide Web Consortium (W3C) (<http://www.w3.org>) has extended the definition of **HTML** to allow new tags to keep pace with changing technology and to bring variations in presentation, such...

...how to translate the logical structure of a source document into a presentation structure (e.g., display **hypertext** links in blue, speak emphasized text in a louder voice, or number figures sequentially). However, these changes...

...INTERNET EXPLORER are not useful.

In response to this limitation the WK instituted a new formatting language, **Extensible Markup Language** ( **XML** ), that specifies neither semantics nor a tag set. **XML** is a restricted form of the Standard Generalized **Markup Language** (SGML) that is more suitable to the Web. SGML is defined by ISO 8879. **XML** is a meta-language for describing **markup languages** . In other destination each.

**XML** documents may be provided to different clients with varied interests and capabilities. For example, a Personal Digital...

...a particular document than that of a Personal Computer (PC) running NETSCAPE NAVIGATOR  
The Extensible Style Language ( **XSL** ) is one style language used by **XML** which allows different clients to receive the same **XML** documents in different formats. **XSL** is defined by the WWW Consortium. The Extensible Style Language Transformation ( **XSLT** ) language, as part of **XSL** , allows an **XML** document to be transformed to another document. The **XSL** specification separates style from content when creating **XML** documents. **XSL** also allows an **XML** document to be transformed to another **XML** document by allowing content transformation. To use **XSL** with **XML** documents, a developer creates an **XSL** stylesheet that describes the transformation of a document written in **XSL** language, and applies the transformation to multiple **XML** documents using an **XSLT** processor. Throughout the specification, **XSL** transformations are defined as the process that transforms the document by 15 using an **XSL** stylesheet.

Although an **XSL** transformation enables developers to transform a particular document to different **XML** documents, the transformations may be limited if the transformation specific for the application is

hard-coded into the application itself. For example, an **XML** document may need to be transformed and/or styled based on different clients of different applications. Each time an application needs to specify a different type of **XSL** transformation for a new type of client, the application must be recompiled and/or restarted. Thus, as...

...costly within an application that resides on an application server. It is therefore desirable to improve existing **XSL** transformation systems to provide automatic transformations for new types of clients and configurations unrelated to the application...

#### ...OF THE INVENTION

Methods and systems consistent with the present invention solve the inherent problems with existing **XSL** transformation systems by providing a transformation registry service that serves as a **XSL** transformation repository.

The **XSL** transformation service enables **XSL** transformations in applications to deliver **XIVIL** documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and **XSL** transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a **XIVIL** document from an application, the application may query the transformation registry service for an appropriate **XSL** transformation for the client and its configuration. The transformation may then be applied to the **XML** document and the transformed **XIVIL** document may be delivered to the requesting client.

Additionally, the transformation registry service provides a facility for developers to enable their applications, to publish and register new **XSL**

transformations, to obtain information for existing transformations, and retrieve **XSL** stylesheets instead of hard-coding the transformation within the application.

The transformation registry service also allows various...

...a flow chart of the steps performed by the data processing system of Fig. 1 when providing **XML** documents to clients in a manner consistent with the present invention.

#### DETAILED DESCRIPTION

The following detailed description....

...Systems and methods consistent with the present invention provide a transformation registry service for developers to publish **XSL** transformations for specific clients and applications, such as applications running on servers. A developer uses an interface associated with the transformation registry service to register applications that require content transformations (of **XML** documents) on a server, to register clients associated with an application, and to provide mappings between the clients and stylesheets. Each stylesheet describes one or more transformations to apply to an **XML** document.

Systems and methods consistent with the present invention enable applications that provide **XMIL** documents, such as a calendar application, to provide different **XML** documents based on the type of client. By enabling applications to interact with the transformation registry service...

...tailored for that specific client. For example, a PDA client, with specific memory requirements, may receive an **XML** document containing limited textual information, and possibly no graphical or audio information. On the other hand, a...

...receive an XIVIL document containing full content. In another example, a client capable of using the **Hypertext** Transport Protocol (HTTP) may receive XIVIL documents in an HTTP format.

As explained, the transformation registry service...

...URL from an application. Based on the client type, the application queries the transformation registry service for a **XSL** transformation for that application, client type, URL, and client configuration. The client type, URL and client configuration 1...More information on the client lookup service is described below. The transformation registry service locates the appropriate **XSL** transformation for the client requesting the URL and returns the **XSL** transformation to the application. To do this, the application queries the transformation registry service to find a...

...an XIVIL document to be transformed.

The transformation registry service provides a number of benefits over traditional **XSL** transformation systems. The transformation registry service maintains **XSL** transformations for multiple applications, clients, and configurations. This way, any type of client may request and receive data in a format suitable for that type of client. Each time a client requests an **XML** document from an application, the transformation registry service provides an appropriate transformation for that client and document...

...registry service provides a facility to represent content in the registry as an XML document, to publish **XML** documents as the content of the registry, to receive additional content as **XML** documents. This may be done through an interface, such as a Web interface. The transformation registry service also provides a programmable interface for developers to access and submit queries for available **XSL** transformations. Applications may update the registry with new **XSL** transformations by accessing the interface. Applications may create a definition for new applications and clients, create multiple...

...request information from and submit information to application server 104, such as weather reports, spreadsheet data, or **XML** documents formatted for client 102.

Application server 104 may host any application (e.g., calendar application, or weather service) that interfaces with clients 102 using **XML** documents 106. Depending upon the type of client requesting an **XML** document 106, application server 104 returns the appropriate **XML** document 106. For example, application server 104 may include the Java Embedded Server (JES), available from Sun Microsystems, Inc. **XML** documents 106 may be located at various locations in network 110. **XML** documents 106 may also be stored in application server 104.

Figure 2 depicts a more detailed...

...320, and an optional video display 322. Memory 302 includes application 304, transformation engine 306, registry 308, **XSLT** service 310, and client lookup service 312. Application 304 receives client requests and provides **XML** documents 106 to those clients.

Transformation engine 306 maintains mappings for all **XSL** stylesheets, responds to queries from application 304, publishes new registries 308, and runs an informative servlet that shows the content of registry 308. A mapping refers to a relationship between each of the **XSL** stylesheets and any other element (e.g., application, client, configuration). A servlet is a program such as...

...306 are described below.

Also included in memory 302 is registry 308. Registry 308 contains the various **XSL** transformations for clients, configurations, and applications. An exemplary data model for registry 308 represented as a tree...XIVIL document (or a set of documents) that may be requested by a client 102, and an **XSL** stylesheet 410 describes a transformation to apply to an **XML** document of a particular configuration 406 to obtain the final transformed document.

One skilled in the art will appreciate that more than one **XSL** stylesheet may be used for a single URL.

Memory 302 also contains an Extensible Style Language Transformation (**XSLT**) service 310. **XSLT** service 310 is a service that applies an **XSL** transformation to an **XML** document given a stylesheet written in **XSL**. **XSLT** service 310 applies **XSL** transformations to **XML** documents 106.

Finally, memory 302 contains a client lookup service 312 used to map a protocol request...

...memory 302. An exemplary representation of static registry 316 parallel to registry 308 is depicted as an **XML** document in Figure 4B that describes a weather report application having a sprinkler, thermometer, and two different...

...of a default application 402, client 404, and configuration 406 that applies a generic stylesheet to an **XML** document 106. Each entry name is associated with by a default entry ('').

For example, if a configuration...the markup tags within the XIVIL document will be interpreted by an application presenting the document. Each **XML** representation in registry 308 utilizes a specific DTD. Figures 4D-4E depict exemplary DTDs for use with...

...for matching configurations in various applications, or clients. This interface may be used to locate an appropriate **XSL** transformation for a requesting client and application.

Interfaces DuplicateConfigurationException, ElementAttachedException, 0 and RegistryDefinitionException return error codes when...

...static registry 316 may be created by a text editor or if desired by any well-known **XML** authoring tool. **XSL** stylesheets are also created for multiple applications 304 (step 504). Once static registry 316 and **XSL** stylesheets for all applications 304 are created, a developer may use the TransformationRegistryService API to load (publish) static registry 316 and the **XSL** stylesheets into registry 308 (step 506). By loading static registry 316, any content already in registry 308 is deleted. In an alternative embodiment, registry 308 may contain links (e.g., URLs) to the specified **XSL** stylesheets. Also in step 506, application(s) 304 may be installed on application server 104. Once application...

...s) 304 may begin providing XIVIL documents 106 to requesting clients 102.

Once registry 308 contains the **XSL** stylesheets, transformation engine 306 may be initiated (step 508). That is, the developer may call the TransformationRegistryService...

...316 as an XIVIL document containing an application definition containing clients, configurations and stylesheets (step 522). An **XSL** stylesheet may also be created for a particular application 304 (step 524).

Once static registry 316 and a **XSL** stylesheet for an application 304 is created, a developer may use the TransformationRegistryService API to

load (publish) static registry 316 and the **XSL** stylesheet into registry 308 (step 526).

Unlike new applications branch 500, by loading static registry 316, any installed on application server 104. Once registry 308 contains the **XSL** stylesheets, transformation engine 306 may be initiated (step 528). Similar to application branch 500, transformation engine 306 next enters a "ready" state.

In one example consistent with the present invention, a developer prepares an **XML** representation of the registry and utilizes a servlet that installs an **XML** document from static registry 316 to registry 308. This may be used when initially loading registry 308...

...308. Since each application 304 is partitioned in registry 308, application 304 may specify new clients and **XSL** transformations without disturbing existing **XSL** transformations.

#### Registry Service

As shown in Figure 6, the transformation registry service is initiated, for example, by application 304 receiving a request from a client 102 for an **XML** document 106 (step 602). The request includes information pertaining to that client. For example, a HTTP request...

...a default configuration or best match is supplied), application 304 may query transformation engine 306 for an **XSL** transformation based on the client type, configuration, and application (step 606).

Alternatively, application 304 may query transformation...  
...may be put in place of all parameters.

Once application 304 queries transformation engine 306 for an **XSL** transformation, transformation engine 306 traverses registry 308 for one or more 1 0 appropriate **XSL** stylesheets and configurations for the requesting client (step 608). It may be that the requesting client requires multiple **XSL** stylesheets to display the XML document.

For example, the application may query transformation engine 306 for configurations...

...this client configuration 406 from registry 308.

Transformation engine 306 then supplies application 304 with the appropriate **XSL** stylesheets(s) (step 610). For example, transformation engine 306 may return a pointer (e.g., URL) to **XSL** stylesheet 410, or may return the complete stylesheet 410 that correspond to the **XSL** transformation to apply.

Once received, application 304 may invoke a **XSLT** service 310 (step 612). **XSLT** service 310 applies received **XSL** stylesheets 410 to the requested XML document 106. If more than one stylesheet 410 needs...

...consistent with the present invention  
provide a transformation registry service that is a transformation repository for multiple **XSL** stylesheets.

Although aspects of the present invention are described as being stored in memory, one skilled in...

...node of the Transformation Registry hierarchy. An Application has Clients, each of which has Configurations that specify **XSL** transformations. These transformations are used to change data (requested by a client) into a form appropriate for...transformregistry

Interface Client

public interface Client

Clients belong to an Application and specify configurations. Each



configuration specifies **XSL** transformations to be applied when the Client matching that Configuration requests a URI.

Client names must be...service.transformregistry

Interface Configuration

public interface Configuration

A Configuration of a Client defines a set of transcodings ( **XSL** transformations) to be used when Clients request data.

A Configuration may have a name, which must be...

...available from the enclosing Client.

Field Summary

static int am

Source node applies to either YJvllL or **HTML**

static int **HTmL**

Source node applies to **HTML**

static int -am

Source node applies to **XML**

Appendix A

Method Summary

Configurati= getcopy(java.lang.String name, java.lang.String description)

Create a deep...

...java.util Enumeration cretParamName O

java.util Enumeration cretTransformations(java.lang.String sourceURI, int type)

Find the **XSL** transformations to be applied on the document at the given source LTRI.

b,,l,a, isDefaultConficruration O...

...String sourceURI,

int type, java.util Enumeration transfOMB)

Set the transformations for a source URI.

Peld Detail

**XML**

public static final int **XML**

Source node applies to **XML**

.....

**HTMEL**

public static final int **HTML**

Source node applies to **HTML**

. ....

**ANY**

public static final int **ANY**

Appendix A

Source node applies to either **XML** or **HTML**

0

Method Detaff

getName

public java.lang.string getNameo

Returns.

The name of the Configuration

....-.....  
.....-....

getDescription

public...

...the URI should be fully qualified (with the exception of localhost).

type - The type of the source ( **XML** , **HTML** , **ANY** ).

transforms - The list of transformations to apply. Each element should be a String URI.

removeTransformationsForSource...

...URI should be fully qualified (with the exception of localhost).  
type - The type of the source (XMI, HTML, ANY).

getTransformations  
public java.util.Enumeration getTransformations(java.lang.String  
sourceURI,  
int type)  
Find the **XSL** transformations to be applied on the document at the given  
source URI.

Parameters.

source - The document's URI.

type - The type of the source (XML, HTML)  
Returns.

An enumeration of **XSL** transformations (Strings) for the transcoding  
whose source best matches the given source. The best match is the...to an  
Application and specify configurations.

Configuration A Configuration of a Client defines a set of transcodings  
(**XSL** transformations) to be used when Clients request data.  
rationOu A ConfigurationQuery is used to fill in all...

...the Client.

T  
ran@formationftjsta@&ctoiy A factory for Transformation Registry  
elements.

The Transfon-nationRegistryService stores the **XSL** transformations  
Transfo ationRgoi lmyend" necessary for various client configurations and  
applications.

Exception Summary  
Exception thrown by Conf...rather than hard-coding them within  
applications or services. Transformations can also be performed  
automatically by the **XML** proxy for registered clients.

Transformation Registry Data Model  
The transformation registry can be represented as a tree...

...B 2 -@@-F-X-S-L-k  
@@L I  
it F-De-f-au`lt--li L@@ **XSL**  
Default lent -lconfiauratiiorill **XSL**  
Application **XSL**  
Configurations specify  
mapping from source  
Registry has Applications Clients have URLs to a list of **XSL**  
Applications have Clients Configurations transformations  
The registry can be queried in accordance with this data model: each...

...removed from each node.

Lastly, the registry (or any single application) may be published by  
using an **XML** document to describe the registry (or application)  
contents.

Transformation Registry AN  
The Transformation Registry API has three...

...a client configuration, and finally specifying the requested URL. This provides the application with a list of **XSL** transformations to be applied. The application may then use the **XSLT** service to perform those transformations.

..... --T . . . . .  
..... @ . 11  
11I.....-.....I.....  
.....- . . . . . 1- . . .  
.....

Overview Package Class Inheritance Deprecated Index Header

PREVPACKAGE...METHOD

com.sun.lhs.service.transformationregistry

Interface TransformationRegistryService

public interface TransformationRegistryService

extends Service

The TransformationRegistryService stores the **XSL** transformations necessary for various client configurations and applications. There are three ways to modify the registry.

Publish...

...is running.

void publish (java.net.URL configurationDocument)

Publish a document to the TransformationRegistryService that specifies the **XSL** transformations to be applied for various clients, applications and configurations.

Void publishApplication (java.net.URL configurationDocument...

...void publish (java.net.URL configurationDocument)

throws RegistryDefinitionException

Publish a document to the TransformationRegistryService that specifies the **XSL** transformations to be applied for various clients, applications and configurations. If the configuration document is valid, it...

Claim

... a canonical form in the registry.

12 The method of claim 1, wherein the stylesheet is an **XSL** transformation.

13 The method of claim 1, wherein a stylesheet corresponds to at least one application.

14...

...receiving a request from a client for an XML document;

querying a transformation registry service for an **XSL** transformation corresponding to the client request;

receiving from the transformation registry service information corresponding to an **XSL** transformation; and

invoking an **XSLT** transformation service to apply the received **XSL** transformation to the XML document.

21 The method of claim 20, further comprising the step of requesting a listing of available **XSL** transformations from the transformation registry.

22 The method of claim 20, further comprising the step of registering **XSL** transformations in the transformation registry.

23 The method of claim 20, wherein the request includes information

associated...a canonical form in the registry.

36 The system of claim 24, wherein the stylesheet is an **XSL** transformation. . The system of claim 24, wherein a stylesheet corresponds to at least one application.

38 The...

...providing an XML document to a client, comprising:  
a transformation registry service that receives queries for an **XSL** transformation corresponding to a client request;  
an application that receives requests from a client for an XML document and that receives from the transformation registry service information corresponding to an **XSL** transformation; and  
an **XSLT** transformation service that applies the received **XSL** transformation to the XML document. . The system of claim 40, wherein the application further requests listings of available **XSL** transformations from the transformation registry service.

46 The system of claim 44, wherein the application further registers **XSL** transformations in the transformation registry service.

47 The system of claim 44, wherein the request includes information claim 49, wherein the stylesheet is an **XSL** transformation.

59 The computer readable medium of claim 49, wherein a stylesheet corresponds to at least one...

...MEMORY

314  
304 Secondary  
Application Storage  
Device 316  
306 Static  
Transformation Registry  
Engine  
308  
Registry  
310  
318  
**XSLT** Service CPU  
312  
Client Lookup  
Service  
322 320  
Video Display Input Device  
FIGn 3  
Application Client  
A...

...CONFIGURATION>

- <TRANSCODING>  
408 -,f--<SOURCE url="\*" />  
410 @@TRANSFORIVI  
url="http://localhost:8080ONVeatherServiceinfo/examples/weather/weatherser  
vice/resources/mozilla. **xsl** " />  
<TRANSCODING>  
</CONFIGURATION>  
4CB,j@- <CONFIGURATION>  
<PARAM name="version" value="1.111 />  
<PARAM name="osname" value="Windows CE" />  
- <TRANSCODING>  
<SOLIRCE url="\*" />  
410,,f@<TRANSFORIVI

```

url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/wince. xsl " />
<TRANSCODING>
</CONFIGURATION>
</CLIENT>
4C4@@- <CLIENT name="sprinkler`5
<CONFIGURATION name="*`5
- <TRANSCODING>
408 -@@ <SOURCE url="*" />
4110-,J@-<TRANSFORIVI
url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/sprinkler. xsl " />
</TRANSCODING>
</CONFIGURATION>
404 -,f@- </CLIENT>
406,,r@- <CLIENT name="thermometer>
- <CONFIGURATION name="*`5
- <TRANSCODING>
408 -,r@<SOURCE url="*" />
410 -,f---<TRANSFORM
urf="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vicelresources/thermometer. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
404,j@- <CLIENT name="weather-vane">
406 @- <CONFIGURATION name="*">
- <TRANSCODING>
408 -,f-@<SOURCE url="*" />
41 0 -,f--<TRANSFORM
url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/weather-vane. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
404 -.@- <CLIENT name="humidity`5
406 <CONFIGURATION name="5
<TRANSCODING>
408 -,J@-<SOLIRCE urf="*" />
410-,j-@<TRANSFORM
url="http://localhost:8080[WeatherServiceInfo/examples/weather/weatherser
vice resources/humidity. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
</APPLICATION>

```

FIG. 4B

R:WAM1NERM16502k0253V,gs.vsd

316

<REGISTRY>

<APPLICATION name="" description="generic application..."

...configuration">

<!-- no parameters needed for this configuration -->

<TRANSCODING>

<SOURCE url="\*" />

<TRANSFORM url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser

</TRANSCODING>

</CONFIGURATION>

</CLIENT>

</APPLICATION>

</REGISTRY>

FIGm 4C

<!-- DTD, Application Publishing, Transformation Registry for LI

<!ELEMENT APPLICATION...

...Registry

For Multiple Changes to Registry For One Application  
Applications  
504 524  
I F I F  
Create **XSL**  
Stylesheets For Create **XSL** Stylesheet  
Multiple Applications For One Application  
506 526  
IF IF  
Publish Static Registry Publish Static Registry  
And...

...10  
Begin  
Receive Client Request 602  
IF  
Determine 604  
Client Type  
IF  
Query Transformation Registry  
Engine for **XSL** Transformation @@606  
Based on Client Type  
I  
Registry Engine Determines  
Proper **XSL** Transformation 608  
Based on Client and  
Configuration  
Receive **XSL** Transformation  
From Registry Engine  
Invoke **XSLT** Service and Apply 612  
**XSL** Transformation  
Send Transformed XML  
Document to Client  
FiGm 6

14/5,K/21 (Item 10 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00740829 \*\*Image available\*\*

**EXTENDING THE CAPABILITIES OF AN XSL STYLE SHEET TO INCLUDE COMPONENTS  
FOR CONTENT TRANSFORMATION**

**EXTENSION DES CAPACITES D'UNE FEUILLE DE STYLE XSL AFIN D'INCLURE DES  
COMPOSANTS PERMETTANT DE TRANSFORMER LES CONTENUS**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC** , 901 San Antonio Road, MS PAL01-521, Palo Alto, CA  
94303, US, US (Residence), US (Nationality)

Inventor(s):

YALCINALP L Umit, 1 Debby Lane, Belmont, CA 94002, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner,

L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200054174 A1 20000914 (WO 0054174)

Application: WO 2000US6379 20000313 (PCT/WO US0006379)

Priority Application: US 99123916 19990312; US 2000523378 20000310

Designated States: JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: **G06F-017/21**

International Patent Class: **G06F-017/22 ; G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7596

#### English Abstract

Systems and methods consistent with the present invention use a Namespace paradigm to define an external component reference to a style sheet (500). When the style sheet processor processes the tags in the style sheet, it recognizes the external component declaration (510). The style sheet will contain a name of the external component instance and a definition of the method to execute associated with the external component instance which is executing (520). The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet (525). The results of the method's execution may be placed in the transform document generated by processing the style sheet (530).

#### French Abstract

L'invention concerne des systemes et des procedes utilisant un paradigme d'espace de noms pour definir une reference de composant exterieur concernant une feuille de style (500). Lorsque le processeur de feuille de style traite les etiquettes sur la feuille de style, il reconnait la declaration de composant exterieur (510). La feuille de style contiendra un nom de l'instance de composant exterieur et une definition du procede a executer associe a ladite instance. La feuille de style contiendra un nom de l'instance de composant exterieur et une definition du procede a executer associe a ladite instance en cours d'execution (520). Le processeur **XSLT** abandonne ensuite le controle au composant exterieur afin d'executer le procede defini sur la feuille de style (525). Les resultats de l'execution du procede peuvent etre places dans le document de transformation genere par le traitement de la feuille de style (530).

#### Legal Status (Type, Date, Text)

Publication 20000914 A1 With international search report.  
Examination 20010215 Request for preliminary examination prior to end of 19th month from priority date  
Correction 20010621 Corrections of entry in Section 1: under (30) replace "Not furnished" by "09/523,378"  
Republication 20010621 A1 With international search report.

#### EXTENDING THE CAPABILITIES OF AN XSL STYLE SHEET TO INCLUDE COMPONENTS FOR CONTENT TRANSFORMATION

#### EXTENSION DES CAPACITES D'UNE FEUILLE DE STYLE XSL AFIN D'INCLURE DES COMPOSANTS PERMETTANT DE TRANSFORMER LES CONTENUS

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/21

International Patent Class: G06F-017/22 ...

... G06F-017/30

Fulltext Availability:

Detailed Description

Claims

#### English Abstract

...definition of the method to execute associated with the external component instance which is executing (520). The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet...

#### French Abstract

...une definition du procede a executer associe a ladite instance en cours d'execution (520). Le processeur **XSLT** abandonne ensuite le controle au composant exterieur afin d'executer le procede defini sur la feuille de...

#### Detailed Description

EXTENDING THE CAPABILITIES OF AN **XSL** STYLE SHEET TO INCLUDE COMPONENTS FOR CONTENT TRANSFORMATION

RELATED APPLICATIONS

Provisional U.S. Patent Application No. 60/123,916 entitled "Enhanced

**XML** Processing for Content Transformation" filed March 12, 1999, is relied upon and is incorporated by reference in...

...style sheets in creating a document, and more particularly, to the use of external components in an **XSL** style sheet.

Description of the Related Art  
Systems' and applications' use of documents has become so prolific...

...documents' display. Style sheets provide greater flexibility and control over the display of a document's content. **XSL** style sheets also allow the content of documents to be transformed, making them as document transformers where...

...a new document incorporating the information contained within the style sheet and the requested document. Typically, an **XSL** style sheet includes the use of tags. Tags are codes that identify an element in the document...

...advanced, to include a type of programming language. An example of this is an Extensible Style Language ( **XSL** ) style sheet. **XSL** is a declarative style sheet language specified in **Extensible Markup Language** ( **XML** ) which can also be used to transform **XSL** documents. The **XSL** is actually more analogous to a programming language than to a mechanism designed purely to analyze tags and display attributes.

With **XML** , developers may provide functionality by creating their own customized tags. For example, **XML** supports links that point to multiple documents, as opposed to **HTML** links, which can reference just one destination each.

**XML** documents may be served to different clients with varied interests and capabilities. For example, a PC running NETSCAPE may require a document formatted differently than a PDA would. **XSL** is the style language used by **XML** to allow different clients to receive different **XML** documents. **XSL** is a specification language for separating style from content when creating **XML** or **HTML** pages. **XSL** style sheets allow a single style to be applied to multiple documents.

However, there are limitations to...

...be used to aid in the modification of document information to be displayed.

Similarly, the use of **XSL** style sheets has been limited. Information contained within the **XSL** style sheet must be defined within the application and the **XSL** style sheet itself, and therefore the style sheet becomes application dependent. This sometimes is not desirable when ...

...in which case a separate style sheet for each application would need to be developed.

Furthermore, the **XSL** style sheet is completely self-contained in that no modules or functions can be called outside the...

...component may generate application specific results. In addition, the style sheet may contain commands written in an **XSL** format.

The step of processing the method associated with the external component may include loading the external component in an **XSLT** processor and initiating the execution of the method associated with the external component. In addition, the step...instance of the external component may also be performed. The external component may be defined to an **XSLT**



processor and the style sheet using a Namespace. And, an application associated with an input document using...

...component to the style sheet and the style sheet processor. The style sheet processor may be an **XSLT** processor and the style sheet contains tags written in an **XSL** format.

And finally, the style sheet processor may be further operative to generate a transform document and...

...consistent with exemplary embodiments of the present invention; Fig. 2 depicts a more detailed view of an **XSLT** processor and components related to the **XSLT** processor suitable for practicing methods and systems in a manner consistent with an exemplary embodiment of the...

...an external component to a style sheet. Namespaces are covered in more detail by the "Namespaces in **XML**" recommendation specification by the World Wide Web Consortium. When the style sheet processor processes the tags in...

...component, and may contain arguments for the method which is executing. The style sheet processor, or the **XSLT** processor in one embodiment, then relinquishes control to the named external component instance to execute the method...

...required, and this execution may provide any results including those not related to the document.

During processing, **XSL** external components may treat the document specific tags as its input declared by specific Namespaces that designate ...

...external component which are also declared with respect to a particular Namespace will be recognized by the **XSLT** processor during the validation of a style sheet as declarations of component invocations. During the processing of a document with a style sheet, an **XSLT** processor will use the component specification along with arguments defined in the **XSL** style sheet to perform the external component method defined to the **XSLT** processor associated with the particular component.

The specific instances of a component may designated by a name...

...the external component's instance which generates a result and placing the result in a document. The **XSLT** processor also ensures that a global processing context which is initialized during the validation step by the **XSLT** processor and can be shared by all the components and their instances referenced within a style sheet...

...of generating fragments of a transformed document. The generated result may depend on the context which the **XSLT** processor supplies to the component's instance. Multiple components or component instances can share the context during...

...8, and a video display 120.

Memory 102 includes application 104, transformation engine 106, registry 108, and **XSLT** processor 110. Application 104 receives client requests and provides **XML** documents to those clients. Transformation engine 106 maintains mapping of all **XSL** translations, responds to queries from application 104, publishes new registries, and runs an informative servlet. A servlet...

...the registry without the need for additional software to interface with the file.

Memory 102 contains an **XSLT** processor 110 that applies the **XSL** transformation to **XML** document 1. Secondary storage device 112 contains

a  
registry as **XML** Document 1 1 4. This registry 1 1 4 is an **XML** representation of registry 108. Registry 1 1 4 serves as a backup that may be easily loaded into memory 102.

Figure 2 depicts a more detailed view of an **XSLT** processor and components related to the **XSLT** processor suitable for practicing methods and systems in a manner consistent with an exemplary embodiment of the present invention. The **XSLT** processor 205 interfaces with multiple modules in order to process an external component declared within a style sheet. The user 200 may request a document and may provide to the **XSLT** processor 205 a client type. For example, the user client type might be a PDA or a browser on a PC. The **XSLT** processor will process this request, and when complete, will send to the user a transform document.

The **XSLT** processor may perform many functions, several of which are depicted in Figure 2. A validation module 2...

...to ensure that the correct style sheet to generate a transform document is used and valid. The **XSLT** processor will also understand the external component declarations specified with Namespaces in the style sheets and load...

...will also incorporate the results of any methods executed by an external component instance, if any. An **XML** Parser 235 may be used to parse the input documents and style sheets. An **XML** Document Builder 240 may be used to build a memory representation of the parsed documents or transformed documents.

To generate this display document, in one embodiment, the **XSLT** processor

205 accesses style sheets 220, components 225, and content, e.g., **XML** documents 230. These style sheets 220, components 225, documents 230, may be contained in memory within the...

...system described with respect to Figure 1, in secondary storage or in other storage areas which the **XSLT** processor 205 can access.

As stated, the user will generate a document request. The **XSLT** processor 205 will recognize, by examining the document request, an associated style sheet. The **XSLT** processor 205 then retrieves the appropriate style sheet associated with the document requested in order to process...

...way of a Namespace paradigm. When the style sheet names a reference to an external component, the **XSLT** processor may create an 1 5 instance of the component if the named component instance has not been created, or use an already created component instance by looking it up with its name. The **XSLT** processor may pass any arguments also defined in the style sheet and initiate the specific method execution...

...i.e., those documents that contain the content of the document requested by the user, which the **XSLT** processor will use in conjunction with the style sheet to generate a transform document.

Figure 3...

...present invention, the style sheet does not have to be application dependent. The style sheet may contain **XSLT** language commands as well as reference to an external component. This external component may be used to...perform various other types of processing.

After processing the external call embedded in the external component, the **XSLT** processor continues to process the rest of the style sheet and the input document. Other methods of...

...style sheet might be activated as described above. When the style sheet

is completely processed by the **XSLT** processor, the process sends a transform document containing the results of the external call to the user...

...using a PC or other type of data processing system by which he has access to the **XSLT** processor. The **XSLT** processor receives the document request and client type from the user and validates the document and the...

...sheet associated with the document (step 405). As part of the validation process, in one embodiment, the **XSLT** processor validates a document by using an **XML** parser and validates a style sheet by using an **XML** parser and using the **XSL** language. **XSL** style sheets are written using the **XSL** language which is described in **XML**.

The **XSLT** processor then receives the style sheet containing reference to an external component (step 410). The style...

...elements in a style sheet. Name attributes within the scope of a component identification element in the **XSLT** style sheet designate a specific instance of a particular component.

The external component may contain a definition...

...be placed within the external component. The component can also utilize a processing context passed by the **XSLT** processor.

The process then checks to see if an instance of the external component already exists, i.e., is active, in the **XSLT** processor (Step 412). If it is determined that an instance is not found in Step 413, then...

...Consequently, the name of the external component may play an important role in this process. If the **XSLT** processor has encountered this named component instance before, it locates and reuses the same component instance. Otherwise...

...processed by the style sheet will be passed to the external component that is being activated. The **XSLT** processor, when processing the style sheet, relinquishes control to the instance of the component so that it ...

...the method defined in the style sheet. After that method has been completed, processing returns to the **XSLT** processor to continue processing the style sheet and hence the input document.

Once all the tags in...

...as well as any other method(s) associated with external components contained in the style sheet, the **XSLT** processor then places in a transform document the results of the tag processing as well as the... activation in a style sheet.

Next, during the validation of the style sheet and processing of the **XSLT** tags, an external component identified by the specific Namespace declaration is identified and is defined to the **XSLT** processor (step 505). The use of Namespaces is well known to those skilled in the art. The...

...know the location for their retrieval. In the present invention, a component Namespace is defined to an **XSLT** library so that during the execution of the style sheet, the **XSLT** processor is aware that an external component is being defined, and it can preload and resolve components which are declared.

Following definition of an external component Namespace to the **XSLT** processor and after validation of the style sheet is finished, the **XSLT** processor starts processing an input document with the validated style

sheet and the loaded components. It processes the **XSL** language tags based on the language semantics and transforms the document in the process. When a component...

...be processed in the style sheet during the style sheet processing with the control flow of the **XSL** language, the **XSLT** processor looks up the named instance of a component which is specified by the component tag. The...

...uses it (Step 510), where it is processed. If the instance already exists, however, the **XSLT** processor reactivates the named instance. Within the external component tag, in one embodiment, is a method definition...

...received from the style sheet (Step 515). This is an indication to the style sheet processor, the **XSLT** processor, that the following text associated with the component tag is for an external component associated with...

...tag within the application. When the special component tag is encountered, its contents will signal to the **XSLT** processor to relinquish control so that a method defined to the external component's named instance may...

...is called (step 522). Any values defined in the style sheet for the method received by the **XSLT** processor are then passed to the specific named method (step 525) as the arguments of the method in the component. The specific method will use the values passed from the **XSLT** processor as its arguments. This step can use the methods specified in the named external component.

A global context which the **XSLT** processor passes to the components to utilize and the current document fragment being processed by the style...

...being processed as selected by the style sheet; 2) the global context that is provided by the **XSLT** processor; and 3) a means for creating document fragments in the transformed 1.5 document that is...

...either by requiring those three additional items to be included in the method signatures by allowing the **XSLT** processor to pass them to the component instance, or by requiring the component to use a specific...

...their own state when they are reactivated to allow them to provide intelligence in document transformation.

The **XSLT** processor is not aware of the functions being performed by processing the external component nor is it...method execution in the external component instance. When the component instance's method returns execution to the **XSLT** processor, it resumes processing the document as specified in the style sheet. The **XSLT** processor during processing the style sheet may require to reuse the named component instance or activate other components instances as specified by the style sheet.

The **XSLT** processor may also perform error handling. The **XSLT** processor may record the method invocations if the method signatures in the named component does not match...

...errors are generated, the component will abort its execution and return a list of exceptions to the **XSLT** processor. Depending on the severity of the errors, the **XSLT** processor may log this as an error and continue processing to generate a transformed document, or the errors severity may abort the **XSLT** processor. Severe errors include, but are not limited to, unloadable components, inability to activate component instances and methods, or components indicating severe errors.

When the **XSLT** processor completes the processing of the style sheet,

the new document containing the results of the style...

...an External Component in a Style Sheet

Below is an example of a style sheet written in **XSL**.

```
<? xml version="1.0"?>
<- XSL Style sheet, DTD omitted ->
< xsl :stylesheet
xmlns: xsl ="http://www.w3.org/TR/V2.0/ xsl "
xmins:xslcomponent--http://www.javasoft.com/lhs
>
< Xsl :template rmatch="paragraph">
<xslcomponent:component
name="summary1"
class="com.sun.lhs.impl.samplecomponents.SummaryBuilder"
>
<xslcomponent:args>
<xslcomponent:methodname="genSummary"/>
<xslcomponent: argname="buffiersize" value=" 100"/>
</xslcomponent:args>
<xslcomponent:component>
< xsl :apply-templates/>
</ xsl :template>
</ xsl :stylesheet>
```

The above example includes a Namespace declaration,  
xmlns:xslcomponent=http://www.javasoft.com/lhs,  
component tag...

...associated with the external component instance, and may contain arguments for the method which is executing. The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet...

Claim

... specific results.

4 The method of Claim 1, wherein the style sheet contains commands written in an **XSL** format.

5 The method of Claim 4, wherein the step of processing the method includes loading the external component in an **XSLT** processor and initiating the execution of the method associated with the external component.

6 The method of...

...the external component.

13 The method of Claim 8 wherein the external component is defined to an **XSLT** processor and the style sheet using a Namespace.

14 The method of Claim 8, wherein the step...

...the style sheet processor.

20 The system of Claim 17, wherein the style sheet processor is an **XSLT** processor and the style sheet contains tags written in an **XSL** format.

21 The system of Claim 17, wherein the style sheet processor is further operative to generate...

...associated with the external component.

Application Server

102

MEMORY

112

104 Secondary

Application Storage

110 Device 114  
**XSLT** Registry as  
 Processor **XML** Document  
 108  
 Registry  
 106  
 Transformation 116  
 Engine CPU  
 120 118  
 Video Display Input Device  
 FIGn 1  
 C...Fig. 4  
 rt  
 00  
 Declare external component namespace  
 in style sheet  
 IF 05  
 Define external component to **XSLT**  
 processor  
 IF 10  
 Load external component in **XSLT**  
 processor  
 IF - 515  
 Receive external component tag in style  
 sheet  
 IF 520  
 Call the method associated with...

...where appropriate, c." the relevant passages Relevant to claim No.  
 A WALSH, N. The Extensible Style Language: **XSL** , WEB 1-22  
 Techniques, January 1999, vol.4, no.1, p 50, 52, 54  
 A EXNER, N. Examining **XML** : new concepts and possibilities in Web 1-22  
 authoring, Computers in Libraries, November 1998, v18, n10,  
 pp 53.  
 A STEVENS, M. Xtending the Enterprise, Intelligent Enterprise, 1-22  
 November 1998, pp  
 A STANEK, W. **XML** 201, PC Magazine, October 1998, 07, n17, 1-22  
 pp. 217.  
 A SENNA, J. **XML** bridges the gap, InfoWorld, June 1998, v20, n22, 1-22  
 pp. 88. Further documents are listed in...

...of document, with indication, where appropriate, of the relevant  
 passages Relevant to claim No.  
 A ZEICHICK, A. **XML** and **XSL** , Network, November 1998, pp 1-22  
 A MCGRATH, S. Rendering **XML** documents using **XSL** , Dr. Dobb's 1-22  
 Journal, v23, n7, pp..86(6)  
 A,P US 65031,989 A...

14/5,K/22 (Item 11 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
 (c) 2003 WIPO/Univentio. All rts. reserv.

00566635 \*\*Image available\*\*

**METHOD AND APPARATUS FOR LOCAL ADVERTISING**  
**TECHNIQUE DE PUBLICITE LOCALE ET DISPOSITIF A CET EFFET**  
 Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,  
 VENKATARAMAN Sriraman,  
 BAEHR Geoffrey,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200030008 A1 20000525 (WO 0030008)  
 Application: WO 99US27061 19991112 (PCT/WO US9927061)  
 Priority Application: US 98192874 19981116

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD  
RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF  
CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 11877

#### English Abstract

Internet Service Providers (ISPs) or proxies (502) owned by ISP insert advertisements transmitted from a web host to a client. The advertisement may be stored in the proxy's cache or may be retrieved from a web server (510) for an advertiser. By providing the ISP with the ability to insert the advertisement, advertisements appear on small web sites that do not normally attract advertisers. Additionally, due to the number of advertisements placed by an ISP, small advertisers may have their advertisements appear in connection with frequently used web sites. One or more embodiments of the invention provide for an ISP to collect and store demographic information (508) such as the user's age, residence, credit history, etc.

#### French Abstract

La presente invention concerne une technique de publicite et un dispositif a cet effet. Les fournisseurs de services Internet (ISP) ou les mandataires (502) qu'ils detiennent, inserent de la publicite et la transmettent au client a partir d'un site d'hebergement. La publicite peut etre stockee dans un cache du mandataire ou recuperee d'un serveur reseau (510) pour un annonceur. En donnant aux ISP cette capacite d'insérer de la publicite, des encarts publicitaires apparaissent sur des petits sites qui d'habitude n'interessent pas les annonceurs. En outre, du fait du nombre d'encarts introduits par un ISP, ceux des petits annonceurs peuvent apparaitre en connexion avec des sites tres frequemment utilises. Au moins une realisation de cette invention permet a un ISP de recueillir et stocker des donnees demographiques (508) telles que l'age, l'adresse, les antecedents en matiere de credit de l'utilisateur, etc.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Fulltext Availability:

Detailed Description

Claims

#### Detailed Description

... computer software, and, more specifically, to advertising on the internet.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Cello.

Information servers maintain the information on the WWW and are capable of processing a client request. **Hypertext** Transport Protocol (HTTP) is the standard protocol for communication with an information server on the

WWW. HTTP...

...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future, speeding up access for commonly requested information. This maintaining of information and fetched **documents** by the proxy 102 is referred to as caching and the information maintained in the proxy 102...of the resource in the file structure of the server.

The WWW uses a concept known as **hypertext**. **Hypertext** provides the ability to create links within a **document** to move directly to other information.

To activate the link, it is only necessary to click on the **hypertext** link (e.g., a in the URL).

If the client request is for a file, the HTTP...

...to the client using the HTTP.

A browser displays information to a client/user as pages or **documents** (referred to as "web pages" or "web sites"). A language is used to define the format for a page to be displayed in the WWW. The language is called **Hypertext Markup Language (HTML)**. A WWW page is transmitted to a client as an **HTML document**. The browser executing at the client parses the **document** and displays a page based on the information in the **HTML document**.

**HTML** is a structural language that is comprised of **HTML** elements that are nested within each other. An **HTML document** is a text file in which certain strings of characters, called tags, mark regions of the **document** and assign special meaning to them. These regions are called **HTML** elements. Each element has a name, or tag. An element can have attributes that specify properties of...

...properties

such as name, type, and value. The following provides an example of the structure of an **HTML document**.

```
< HTML >
<HEAD>
.... element(s) valid in the document head
</HEAD>
<BODY>
.... element(s) valid in the document body
</BODY>
</ HTML >
```

Each **HTML** element is delimited by the pair of characters "<" and ">". The name of the **HTML** element is contained within the delimiting characters. The combination of the name and delimiting characters is referred to as a...

...marker. The ending marker is identified by the inclusion of an additional character, "/" that follows the "<" character.

**HTML** is a hierarchical language. With the exception of the **HTML** element, all other elements are contained within another element. The **HTML** element encompasses the entire **document**. It identifies the enclosed text as an

**HTML document**. The HEAD element is contained within the **HTML** element

and includes information about the **HTML document**. The BODY element is contained within the **HTML**. The BODY element contains all of the text and



other information to be displayed. Other **HTML** elements are described in **HTML** reference manuals.

#### Advertising

In traditional media (e.g., television, radio, and newspaper), local advertising is provided by...web page with an empty slot due to an **IMG** directive (a directive (as specified in the **HTML** of the web page) to load an inline image stored on the server). An advertisement slot is...web server 404. In one or more embodiments, the characteristics of the advertisement and advertisement slot are **encoded** as **part** of the URL itself or around the URL (but not **encoded** as **part** of the **LJRQ**). In another embodiment, the characteristics of the advertisement and advertisement slot are specified in tags of the **HTML** - In another embodiment, the characteristics of the advertisement and the advertisement slot may be shipped as part...s set price.

#### Advertisement Tags

To specify advertisement characteristics, advertisement tag(s) may be specified in the **HTML**. The server could specify a tag or tag combination (e.g., a **<A>** ... **</A>** block that follows...with a value of 34.

Alternatively, instead of specifying the above information in the form of an **HTML** tag, the information may be specified as part of the URL request that is provided to the...

...part of the data stream. For example, the server may specify that the advertisement slot in the **HTML** is transmitted as characters or bytes 55 to 75 of the data stream.

Auditing and Cross Verification...

#### Claim

... said second advertisement.

7 The method of claim 2 wherein said advertisement slot is identified by an **HTML** tag.

. The method of claim 2 further comprising:  
said proxy obtaining profile information relating to a client...

...for inserting said advertisement.

. The method of claim 28 wherein said available space is identified by an **HTML** tag.

34 The method of claim 28 further comprising said proxy obtaining profile information relating to a...

14/5,K/23 (Item 12 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv..

00566629 \*\*Image available\*\*

**METHOD AND APPARATUS FOR NEGOTIATING TERMS FOR LOCAL ADVERTISING**  
**PROCEDE ET DISPOSITIF DE NEGOCIATION DES TERMES D'UNE PUBLICITE LOCALE**  
Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,

BAEHR Geoffrey,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200030002 A1 20000525 (WO 0030002)

Application: WO 99US26697 19991112 (PCT/WO US9926697)

Priority Application: US 98192874 19981116; US 99343965 19990630

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ  
BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14926

#### English Abstract

A method and apparatus for local advertising. Web hosts sell advertising space on their web site and distribute web pages including the advertisements to Internet users or clients. It is desirable for advertisements to target specific audiences and persons that may be interested in the specific good or service being advertised. One or more embodiments of the invention provide for advertisements that are transmitted (606) from a web host to a client. The inserted advertisement may be an advertisement that is stored in the proxy's cache (604) or may be retrieved from a web server for an advertiser. One or more embodiments of the invention provide for a module to be downloaded to the proxy that is responsible for negotiating and inserting the advertisement.

#### French Abstract

L'invention concerne un procede et un dispositif de publicite locale. Des hotes du Web vendent des espaces publicitaires sur leur site Web et distribuent des pages Web comprenant les publicites a des utilisateurs ou clients de l'Internet. Il est souhaitable que les publicites ciblent un public specifique qui puisse etre interesse par une marchandise ou un service en particulier, annonce par publicite. Dans un ou plusieurs modes de realisation de l'invention, de publicites sont transmises (606) a partir d'un hote du Web, a un client. La publicite inseree peut etre une publicite conservee dans l'antememoire du mandataire (604), ou elle peut etre extraite a partir d'un serveur du Web, pour un publicitaire. L'invention concerne egalement un module, destine a etre telecharge en direction du mandataire responsable de la negociation et de l'insertion de la publicite.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Fulltext Availability:

Detailed Description

#### Detailed Description

... computer software, and, more specifically, to advertising on the internet.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Cello.

Information servers maintain the information on the VVWW and are capable of processing a client request. **Hypertext** Transport Protocol (HTTP) is the standard protocol for communication with an information server on the VVWW. HTTP...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future,

speeding up access  
for commonly requested information. This maintaining of information and  
fetched **documents** by the proxy 102 is referred to as caching and the  
information maintained in the proxy 102...

...of the resource in the file structure of the server.

The VVWW uses a concept known as **hypertext**. **Hypertext** provides the  
ability to create links within a **document** to move directly to other  
information.

To activate the link, it is only necessary to click on the **hypertext**  
link (e.g., a WO 00/30002 PCT/US99/26697

7

the link to identify the location...

...to the client using the HTTP.

A browser displays information to a client/user as pages or **documents**.  
(referred to as "web pages" or "web sites"). A language is used to define  
the

format for a page to be displayed in the WWW. The language is called  
**Hypertext Markup Language (HTML)**. A VAIWV page is transmitted to  
a client as an **HTML document**. The browser executing at the client  
parses the **document** and displays a page based on the information in the  
**HTML document**.

**HTML** is a structural language that is comprised of **HTML** elements that  
are nested within each other. An **HTML document** is a text file in  
which certain strings of characters, called tags, mark regions of the  
**document** and assign  
special meaning to them. These regions are called **HTML** elements. Each  
element has a name, or tag. An element can have attributes that specify  
properties of...

...properties

such as name, type, and value. The following provides an example of the  
structure of an **HTML document**.

```
< HTML >
<HEAD>
.... element(s) valid in the document head
</HEAD>
<BODY>
.... element(s) valid in the document body
</BODY>
</ HTML >
```

Each **HTML** element is delimited by the pair of characters "<" and ">".  
The name of the **HTML** element is contained within the delimiting  
characters. The combination of the name and delimiting characters is  
referred to by the inclusion of an another character, "/" that follows the  
"<" character.

**HTML** is a hierarchical language. With the exception of the **HTML**  
element, all other elements are contained within another element. The  
**HTML** element encompasses the entire **document**. It identifies the  
enclosed text as an

**HTML document**. The HEAD element is contained within the **HTML**  
element  
and includes information about the **HTML document**. The BODY element is  
contained within the **HTML**. The BODY element contains all of the text  
and  
other information to be displayed. Other **HTML** elements are described in  
**HTML** reference manuals.

Advertising

In traditional media (e.g., television, radio, and newspaper), local

advertising is provided by...web page with an empty slot due to an IMG directive (a directive (as specified in the **HTML** of the web page) to load an inline image stored on the server). An advertisement slot is...image set to a particular URL (e.g., [www.CREDITCARD.com/NEW-AD.GIF](http://www.CREDITCARD.com/NEW-AD.GIF)) and the HREF (**Hypertext** REference used to specify the name or URL of the file that is loaded when the user ...

...the request and replies with a web page fetched from the company placing the advertisement (e.g., **HTML** text from [www.CARMAN-UFACTURER.com/cardeals.html](http://www.CARMAN-UFACTURER.com/cardeals.html) ).

In one or more embodiments of the invention, web server 404 can create new, unique identifiers for...web server 404. In one or more embodiments, the characteristics of the advertisement and advertisement slot are **encoded** as **part** of the URL itself or around the URL (but not **encoded** as **part** of the URL). In another embodiment, the characteristics of the advertisement and advertisement slot are specified in tags of the **HTML** . In another embodiment, the characteristics of the advertisement and the advertisement slot may be shipped as part...as standalone Java applications, or as Java "applets" which are identified by an applet tag in an **HTML** document , and loaded by a browser application. The class files associated with an application or applet may be...400 are faster.

#### Advertisement TWs

To specify advertisement characteristics, advertisement tag(s) may be specified in the **HTML** - The server could specify a tag or tag combination (e.g., a **<A>** ... **</A>** block that follows...

...with a value of 34.

Alternatively, instead of specifying the above information in the form of an **HTML** tag, the information may be specified as part of the URL request that is provided to the...

...part of the data stream. For example, the server may specify that the advertisement slot in the **HTML** is transmitted as characters or bytes 55 to 75 of the data stream.

Auditing and Cross Verification...

14/5,K/24 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00549734 \*\*Image available\*\*

#### METHOD AND APPARATUS FOR ENCODING CONTENT CHARACTERISTICS

#### PROCEDE ET APPAREIL DE CODAGE DE CARACTERISTIQUES D'UN CONTENU

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,

POGER Elliot,

SCHUBA Christoph,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200013107 A2 20000309 (WO 0013107)

Application: WO 99US18990 19990819 (PCT/WO US9918990)

Priority Application: US 98146381 19980901

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG  
Main International Patent Class: H04L-029/06  
International Patent Class: G06F-017/30  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 6173

#### English Abstract

A method and apparatus for encoding characteristics for the retrieval of information. Depending on the characteristics, some methods for retrieving information may be preferred. If information is too large to utilize UDP, then TCP may be preferred. In addition, if information is not cacheable, then it is preferable to retrieve the information directly from the server instead of searching the cache first. A URL (Uniform Resource Locator) is utilized on the internet to specify the application protocol (e.g., http), the domain name (e.g., www.sun.com), and file location (e.g., /users/hcn/index..html ). The suffix of a file indicator is utilized to identify how to process the data or information subsequent to retrieval. One or more embodiments of the invention provide for encoding characteristics of data to be transferred that indicates or hints at an optimal method to retrieve the data. For example, the URL may specify that TCP is the preferred transfer protocol, thereby avoiding an attempted transfer using UDP. Additionally, the encoding may specify that the client should preferably retrieve the information directly from the server instead of searching the proxy cache. The characteristics or preferred retrieval method may be encoded in any portion of a URL. Additionally, one or more embodiments of the invention provide for backwards compatibility with existing internet browsers by encoding the characteristics in the file location portion of the URL instead of the application protocol identifier portion.

#### French Abstract

L'invention concerne un procede et un appareil de codage de caracteristiques pour la recherche d'informations. Selon les caracteristiques, on peut preferer certains procedes de recherche d'informations. Si le volume d'informations est trop important pour utiliser le protocole datagramme (UDP), on opte pour le protocole de commande de transmission (TCP). En outre, si les informations ne peuvent etre stockees dans une antememoire, il est recommande de les extraire directement du serveur plutot que d'explorer l'antememoire. Un localisateur de ressources universel (URL), utilise sur l'internet, permet de preciser le protocole d'application (par exemple http), le nom de domaine (par exemple www.sun.com) et la localisation de fichiers (par exemple /users/hcn/index. html ). Le suffixe d'un indicatif de fichier sert a determiner le mode de traitement des donnees ou des informations une fois la recherche effectuer. Une ou plusieurs realisations selon l'invention reposent sur le codage des caracteristiques des donnees a transferer qui indiquent ou suggerent un procede optimal pour rechercher les donnees en question. Par exemple, l'URL peut specifier que le TCP est le protocole de transfert prefere, et permet ainsi d'eviter une tentative de transfert utilisant le protocole UDP. En outre, le codage peut preciser que le client devrait, de preference, extraire l'information directement du serveur ou lieu de l'antememoire mandataire. On peut coder les caracteristiques ou le procede de recherche prefere dans n'importe quelle partie d'un URL. De plus, une ou plusieurs realisations selon l'invention reposent sur une compatibilite retroactive avec des navigateurs internet existants par codage des caracteristiques de la partie localisation de fichiers de l'URL, au lieu de la partie de l'identificateur du protocole d'application.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: H04L-029/06  
International Patent Class: G06F-017/30  
Fulltext Availability:

## Detailed Description

### English Abstract

...http), the domain name (e.g., www.sun.com), and file location (e.g., /users/hcn/index. **html** ). The suffix of a file indicator is utilized to identify how to process the data or information...

### French Abstract

...de domaine (par exemple www.sun.com) et la localisation de fichiers (par exemple /users/hcn/index. **html** ). Le suffixe d'un indicatif de fichier sert a determiner le mode de traitement des donnees ou...

### Detailed Description

... of computer software, and, more specifically, to optimizing network traffic.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Netscape Navigator and Internet Explorer.

A browser displays information to a client or user as pages or **documents** . A language called **Hypertext Markup Language ( HTML )** is used to define the format for a page to be displayed in the browser. A Web page is transmitted to a client as an **HTML document** . The browser executing at the client parses the **document** and produces and displays a Web Page based on the information in the **HTML document** . Consequently, the **HTML document** defines the Web Page that is rendered at runtime on the browser.

B. Network Communication/Data Transfer...UDP) is utilized to ensure that the Application Protocol commands are completely transmitted to the receiving end. **HyperText Transfer Protocol (HTTP)** is the standard application protocol for communication with an information server on the WWW...

...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future, speeding up access for commonly requested information. This maintaining of information and fetched **documents** by the proxy 102 is referred to as caching and the information maintained in the proxy 102...

...the file structure of the server. For example, the URL "http://www.sunlabs.com/research/hcn/index. **html** " specifies the application protocol ("http"), the server host name ("www.sunlabs.com"), and the filename to be retrieved ("/research/hcn/index. **html** "). If the client request is for a file, the HTTP server locates the file and sends it...

...via command-line arguments, standard input, or environment variables. The gateway program processes the data, generates an **HTML document** , and returns the **HTML document** as its response to the server using CGI (via standard input, for example). The server forwards the **HTML document** to the client using the HTTP.

Once files have been retrieved, the client may utilize or process the file.

For example, if a **HTML document** is retrieved, a client's web browser

may  
parse the **HTML document** and display the **document**. Depending on the type of file retrieved, the client may activate an application to process the file.

For example, if a word processing **document** is retrieved, the client may activate a word processor to process the **document**. Alternatively, if an image file is retrieved, an image viewer may be activated to process and display...

...period "." and several letters that are attached to the end of a file name. For example, an **HTML document** may end with the suffix ".htm" or ".html" (e.g., Index.html) or "home.html"), a word processing **document** filename may end with the suffix ".doc" (e.g., "report.doc" or "letter.doc"), a JPEG (joint...

...image filename may end with the suffix ".jpg" (e.g., "image.jpg" or "picture.jpg"), and a postscript **document** (**document** created in the postscript page description language) may end with the suffix ".ps" (e.g., "calendar.ps...).

...http), the domain name (e.g., www.sun.com), and file location (e.g., /users/hcn/index.html). The suffix of a file indicator is utilized to identify how to process the data or information...server thereby influencing the transfer of information across a network. Further, the facts or hints may be **encoded** into any **part** of a URL.

Figure 5 demonstrates a method for the encoding and use of information in URLs...display in the web browser. Such information may be passed in the form of a parameter in

**HTML**. For example, the file suffix "html?u" in the URL "http://www.sunlabs.com/research/hcn/index.html?u" passes the parameter it " indicating a UDP transfer.

u  
By encoding the information in the file...to the methods of the prior art (i.e., by invoking an image viewer, word processor, or **HTML document** browser to process the retrieved information).

Thus, a method and apparatus for encoding content characteristics for the...

14/5,K/25 (Item 14 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00546708 \*\*Image available\*\*

**METHOD AND APPARATUS OF TRANSLATING AND EXECUTING NATIVE CODE IN A VIRTUAL MACHINE ENVIRONMENT**

**PROCEDE ET APPAREIL DE TRADUCTION ET D'EXECUTION D'UN CODE NATIF DANS UN ENVIRONNEMENT MACHINE VIRTUELLE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

UNGAR David,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200010081 A2 20000224 (WO 0010081)

Application: WO 99US18158 19990810 (PCT/WO US9918158)

Priority Application: US 98134073 19980813

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ

MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-009/45

International Patent Class: G06F-009/455

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8983

#### English Abstract

A method and apparatus of translating and executing native code in a virtual machine environment. Debugging of a virtual machine implementation is made easier through binary translation of native code, which permits greater platform independence and greater control over thread management and scheduling, and provides for identification of memory access errors in the native code. When native code is to be executed within a virtual machine environment, the native code is translated into an intermediate form. This intermediate form is processed to determine where memory access and blocking system calls occur. Validity checks are inserted into memory accessed calls to determine whether the portion of memory to be accessed by each call is within a permitted range. Wild pointers and other sources of memory access errors associated with the native code may thus be identified. Blocking system calls are replaced with non-blocking variants, and "yield" operations may be inserted into system calls and loops. The revised native code incorporating memory access validity checks and non-blocking system calls is compiled or interpreted by the virtual machine to execute the routines defined by the native code. Because the revised native code does not block other threads, threads scheduling may be managed by the virtual machine rather than the underlying operating system, and cooperative scheduling may be performed.

#### French Abstract

Procede et appareil de traduction et d'execution d'un code natif dans un environnement machine virtuelle. Le debogage d'une mise en application machine virtuelle est facilite par la traduction binaire d'un code natif, ce qui permet une plus grande independance de la plate-forme et une meilleure commande de la gestion et de la programmation des files et permet egalement l'identification d'erreurs d'accès en memoire dans le code natif. Lorsque le code natif doit etre execute dans un environnement machine virtuelle, ledit code natif est traduit en une forme intermediaire. La forme intermediaire est traitee pour determiner ou l'accès en memoire et les appels bloquant le systeme se produisent. Des controles de validite sont inseres dans les appels d'accès en memoire pour determiner si la partie de la memoire faisant l'objet d'un accès par chaque appel se trouvent dans une gamme permise. Des pointeurs sauvages et d'autres sources d'erreurs d'accès en memoire associes au code natif peuvent ainsi etre identifiees. Les appels bloquants le systeme sont remplaces par des variantes non bloquantes et des operations de "fourniture" peuvent etre inserees dans les appels et les boucles systeme. Le code natif revise contenant des controles de validite d'accès en memoire et des appels systeme non bloquants est compile ou interprete par la machine virtuelle pour executer les sous-programmes definis par le code natif. Etant donne que le code natif revise ne bloque pas d'autres files, la programmation de files peut etre geree par la machine virtuelle au lieu du systeme d'exploitation sous-jacent, et une programmation cooperative peut etre executee.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-009/45

International Patent Class: G06F-009/455

Fulltext Availability:

Detailed Description

#### Detailed Description

... as standalone Java applications, or as

Java "applets" which are identified by an applet tag in an HTML (



hypertext markup language ) document , and loaded by a browser application. The class files associated with an application or applet may be...

...server on a network,  
a web server application is executed on the server to respond to HTTP ( hypertext transport protocol) requests containing URLs (universal resource locators) to HTML documents , also referred to as "web pages." When a browser application executing on a client platform receives an HTML document (e.g., as a result of requesting an HTML document by forwarding a URL to the web server), the browser application parses the HTML and automatically initiates the download of the specified bytecode class files when it encounters an applet tag in the HTML document .

The classes of a Java applet are loaded on demand from the network (stored on a server...to provide enhanced debugging capabilities over prior art native method execution processes. The processing of the native code includes, as part of a binary translation procedure, the insertion of checks for memory access bugs, such as might be...

14/5,K/26 (Item 15 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00386801 \*\*Image available\*\*

**PROCESSOR WITH ACCELERATED ARRAY ACCESS BOUNDS CHECKING**

**PROCESSEUR A VERIFICATION ACCELEREE DES LIMITES D'ACCES AUX MATRICES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

JOY William N,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727544 A1 19970731

Application: WO 97US1305 19970123 (PCT/WO US9701305)

Priority Application: US 9610527 19960124; US 96642248 19960502

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: **G06F-012/14**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 39617

English Abstract

An array boundary checking apparatus is configured to verify that a referenced element of an information array is within a maximum array size boundary value and a minimum array size boundary value. The array boundary checking apparatus of the invention includes an associative memory element that stores and retrieves a plurality of array bound values. Each one of the plurality of array bound values is associated with one of the plurality of array access instructions. An input section simultaneously compares the array access instruction identifier with at least a portion of each of the stored array reference entries, wherein the array access instruction identifier identifies an array access instruction. An output section is configured to provide as an array bounds output values one of the plurality of array bound values stored in one of the plurality of memory locations of the associated memory element. A first comparison element compares the value of the referenced element and the maximum array index boundary value and provides a maximum violation signal if the value of the element is greater than the maximum

array size boundary value. A second comparison element compares the value of the element and the minimum array size boundary value and provides a minimum violation signal if the value of the element is less than the minimum array bounds value. Either a maximum violation signal or a minimum violation signal results in an exception.

#### French Abstract

La presente invention concerne un dispositif de verification des limites de matrice qui est configure de facon a verifier qu'un element designe dans une matrice d'information se trouve compris entre une valeur limite maximale de taille de matrice et une valeur limite minimale de taille de matrice. Le dispositif de verification des limites de matrice de l'invention comporte un element de memoire associative stockant et restituant une pluralite de valeurs limites de matrices. Chacune des differentes valeurs limites de matrices est associee a l'une des differentes instructions d'accès a la matrice. Un module d'entree compare simultanement l'identificateur d'instruction d'accès a la matrice et au moins une partie de chacune des rubriques de designation de matrice stockees, l'identificateur d'instruction d'accès designant une instruction d'accès de matrice. Un module de sortie est configure pour fournir, sous forme de valeurs de sortie de limites d'une matrice, l'une des differentes valeurs de limites de matrice stockees dans l'un des differents emplacements memoire de l'element de memoire associe. Un premier comparateur, qui effectue une comparaison entre la valeur de l'element designe et la valeur limite maximum de l'indice de matrice, delivre un signal de violation de maximum si la valeur de l'element est superieure a la valeur limite maximale de taille de matrice. Un second comparateur, qui fait une comparaison entre la valeur de l'element et la valeur limite minimale de la taille de matrice, delivre un signal de violation de minimum si la valeur de l'element est inferieure a la valeur limite minimale de la matrice. Tout signal de violation de maximum et de violation de minimum genere une condition d'exception.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-012/14**

Fulltext Availability:

Detailed Description

#### Detailed Description

... ACCELERATED ARRAY ACCESS BOUNDS CHECKING

REFERENCE TO Appendix I

A portion of the disclosure of this patent

**document** including Appendix I. The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The

copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...being used for

external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP (**Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1,8 The JAVA...words of arguments in a method call is limited to 255.

## 2, Class File Format

This chapter **documents** the JAVA class (.class) file format.

Each class file contains the compiled version of either a JAVA...Machine Instruction Set

### 3.1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name

Short description of the instruction

Syntax.

opcode=number...

14/5,K/27 (Item 16 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00386796 \*\*Image available\*\*

## **METHODS AND APPARATUSES FOR STACK CACHING**

## **PROCEDES ET DISPOSITIFS DE GESTION DE PILE EN ANTEMEMOIRE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727539 A1 19970731

Application: WO 97US1303 19970123 (PCT/WO US9701303)

Priority Application: US 9610527 19960124; US 96642253 19960502; US 96647103 19960507

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: **G06F-009/42**

International Patent Class: **G06F-12:08**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 42794

English Abstract

The present invention provides a stack management unit (150) including a stack cache (155) to accelerate data transfers between the stack-based computing system and the stack (400). In one embodiment, the stack management unit (150) includes a stack cache (155), a dribble manager unit (151), and a stack control unit (152). The dribble manager unit (151) includes a fill control unit (694) and a spill control unit (698). Since the vast majority of memory accesses to the stack (400) occur at or near the top of the stack (400), the dribble manager unit (151) maintains the top portion of the stack (400) in the stack cache (155). Specifically, when the stack-based computing system is pushing data onto the stack (400) and a spill condition occurs, the spill control unit (698) transfers data from the bottom of the stack cache (155) to the stack (400) so that the top portion of the stack (400) remains in the stack cache (155). When the stack-based computing system is popping data off of the stack (400) and a fill condition occurs, the fill control unit (694) transfers data from the stack (400) to the bottom of the stack cache (155) to maintain the top portion of the stack (400) in the stack cache (155). Typically, a fill condition occurs as the stack cache (155) becomes empty and a spill condition occurs as the stack cache (155) becomes full.

#### French Abstract

La presente invention concerne une unite de gestion de pile (150) comprenant une antememoire de pile (155) destinee a accelerer les echanges de donnees entre la pile (400) et le systeme informatique a gestion par pile. Selon une realisation, l' unite de gestion de pile (150) comporte une antememoire de pile (155), un regulateur de flux (151) et un module de gestion de pile (152). Le regulateur de flux (151) comporte une unite de regulation de remplissage (694) et une unite de regulation de debordement (698). Etant donne qu'une grande majorite des acces memoire a la pile (400) se fait au niveau de, ou a proximite du sommet de la pile (400), le regulateur de flux (151) maintient le haut de la pile (400) dans l'antememoire de pile (155). En particulier, lorsque le systeme informatique a gestion par pile introduit des donnees dans la pile (400) et qu'il se presente une condition de debordement, l' unite de regulation de debordement (698) transfere les donnees du bas de l'antememoire de pile (155) vers la pile (400) de facon que le haut de pile (400) reste dans l'antememoire de pile (155). Lorsque le systeme informatique a gestion par pile chasse des donnees en les faisant remonter dans la pile (400) et qu'il se presente une condition de remplissage, l' unite de regulation de remplissage (694) transfere des donnees de la pile (400) vers le bas de l'antememoire de pile (155) de facon a conserver la haut de la pile (400) dans l'antememoire de pile (155). En general, il se produit une condition de remplissage a chaque fois que l'antememoire de pile (155) se vide, et il se produit une condition de debordement a chaque fois que l'antememoire de pile (155) est saturee.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/42**

International Patent Class: **G06F-12:08**

Fulltext Availability:

Detailed Description

#### Detailed Description

... AND APPARATUSES FOR STACK CACHING

REFERENCE TO Appendix I

A portion of the disclosure of this patent

**document** including Appendix I, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The

copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...being used for external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP ( **Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...Mountain View, California 94043-1100 U.S.A.

All rights reserved. This BETA quality release and related **documentation** are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this release or related **documentation** may be reproduced in any form by any means without prior written authorization of Sun and its...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

#### Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1.8 The JAVA...words of arguments in a method call is limited to 255.

#### 2, Class File Format

This chapter **documents** the JAVA class (.class) file format.

Each class file contains the compiled version of either a JAVA...Machine Instruction Set

#### 3,1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name

Short description of the instruction

Syntax.

opcode=number...

00386794      \*\*Image available\*\*

**A PROCESSOR FOR EXECUTING INSTRUCTION SETS RECEIVED FROM A NETWORK OR FROM  
A LOCAL MEMORY**

**PROCESSEUR D'EXECUTION DE JEUX D'INSTRUCTIONS RECUS D'UN RESEAU OU D'UNE  
MEMOIRE LOCALE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727537 A2 19970731

Application: WO 97US1307 19970123 (PCT/WO US9701307)

Priority Application: US 9610527 19960124; US 96104 19960502

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: **G06F-009/318**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 38682

**English Abstract**

A dual instruction set processor can decode and execute both code received from a network and other code supplied from a local memory. Thus, the dual instruction set processor is capable of executing two different types of instructions, from two different sources, permitting the dual instruction set processor to have maximum efficiency. A computer system with the foregoing described dual instruction set processor, a local memory, and a communication interface device, such as a modem, for connection to a network, such as the Internet or an intranet, can be optimized to execute, for example, JAVA code from the network, and to execute non-JAVA code stored locally, or on the network but in a trusted environment or an authorized environment.

**French Abstract**

La presente invention concerne un processeur de double jeu d'instructions capable de decoder et d'exécuter non seulement un code recu d'un reseau, mais aussi un code different fourni par une memoire locale. Un tel processeur de double jeu d'instructions est capable d'exécuter deux types differents d'instructions en provenance de deux sources differentes, ce qui lui confere une efficacite maximale. Un systeme informatique comprenant ce type de processeur de double jeu d'instructions, une memoire locale, et un dispositif d'interface de communications, par exemple un modem, permettant un raccordement a un reseau de type Internet ou Intranet, est optimisable notamment pour l'exécution, par exemple, du code JAVA en provenance du reseau et pour l'exécution de code non JAVA stocke localement, ou sur le reseau, mais dans un environnement a deux niveaux de securite ou dans un environnement autorise.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/318**

Fulltext Availability:

Detailed Description

Detailed Description.

... OR FROM A LOCAL MEMORY

REFERENCE TO Appendix I

A portion of the disclosure of this patent document including Appendix I, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark office patent files...

...being used for external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP (**Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...Mountain View, California 94043-1100 U.S.A.

All rights reserved. This BETA quality release and related **documentation** are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this release or related **documentation** may be reproduced in any form by any means without prior written authorization of Sun and its...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

#### Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1,8 The JAVA...words of arguments in a method call is limited to 255.

#### 2e Class File Format

This chapter **documents** the JAVA class (.class) file format.

is Each class file contains the compiled version of either a...Instruction Set

#### 3.1 Po-rmat for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an

00386793      \*\*Image available\*\*

**INSTRUCTION FOLDING FOR A STACK-BASED MACHINE**  
**PLIAGE D'INSTRUCTIONS POUR MACHINE A EMPILEMENT**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

O'CONNOR James Michael,  
TREMBLAY Marc,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727536 A1 19970731

Application: WO 97US1221 19970123 (PCT/WO US9701221)

Priority Application: US 9610527 19960124; US 96984 19960507

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: **G06F-009/318**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 46100

English Abstract

An instruction decoder (135, 1118) allows the folding away of JAVA virtual machine instructions pushing an operand onto the top of a stack (e.g., 423, 155, 812) merely as a precursor to a second JAVA virtual machine instruction which operates on the top of stack operand. Such an instruction decoder identifies foldable instruction sequences and supplies an execution unit with a single equivalent folded operation, thereby reducing processing cycles otherwise required for execution of multiple operations corresponding to the multiple instructions of the folded instruction sequence. Instruction decoder embodiments described herein provide for folding of two, three, four, or more instruction folding. For example, in one instruction decoder embodiment described herein, two load instructions and a store instruction can be folded into execution of operation corresponding to an instruction appearing therebetween in the instruction sequence.

French Abstract

Decodeur d'instructions (135, 1118) permettant de plier des instructions machine virtuelles JAVA en poussant un operande sur le sommet d'une pile (par exemple 423, 155, 812), pour servir simplement de precurseur a une deuxieme instruction machine virtuelle JAVA qui fonctionne au sommet de l'operande de la pile. Ce decodeur d'instructions identifie des sequences d'instructions pliables et fournit une unite d'execution avec une seule operation pliee equivalente, ce qui reduit les cycles de traitement requis par ailleurs pour l'execution d'operations multiples correspondant aux instructions multiples de la sequence d'instructions pliees. Les modes de realisation de decodeurs d'instructions decrits ici prevoient le pliage de deux, trois, quatre instructions ou plus. Ainsi, dans l'un des modes de realisation de decodeur d'instructions decrits ici, deux instructions de charge et une instruction de stockage peuvent etre pliees pour l'execution des operations correspondant a une instruction apparaissant entre elles dans la sequence d'instructions.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/318**

Fulltext Availability:

Detailed Description

Detailed Description

... FOR A STACK-BASED MACHINE

REFERENCE TO APPENDIX I

A portion of the disclosure of this patent document including Appendix 1, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection,



The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...transactions between the business and the outside world. For the purposes of  
SUBSTMITE SHEET (RULE 26)  
this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an... routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HT`TP ( **Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

SUBSTMITE SHEET (RULE 26)

- 48

Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. we have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...26)

- 54

method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1.8 The JAVA...

...words of arguments in a method call is limited to 255.

2. Class File Format

This chapter **documents** the JAVA class (.class) file format.

SUBSTMUTE SHEET (RULE 26)

.55

Each class file contains the compiled...Machine Instruction Set

3.1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name

Short description of the instruction

Syntax.

opcode=number...

14/5,K/33 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013674794 \*\*Image available\*\*

WPI Acc No: 2001-159006/200116

XRPX Acc No: N01-115902

**Extensible style language transformation in Internet, by determining proper XSL transformation based on client type and configuration, to enable application to access registry on proper transformation confirmation**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM  
Inventor: KUZNETSOV P; YALCINALP L U  
Number of Countries: 093 Number of Patents: 004  
Patent Family:

| Patent No     | Kind | Date     | Applicat No    | Kind | Date     | Week     |
|---------------|------|----------|----------------|------|----------|----------|
| WO 200073941  | A2   | 20001207 | WO 2000US14602 | A    | 20000530 | 200116 B |
| AU 200055899  | A    | 20001218 | AU 200055899   | A    | 20000530 | 200118   |
| EP 1236129    | A2   | 20020904 | EP 2000941150  | A    | 20000530 | 200266   |
|               |      |          | WO 2000US14602 | A    | 20000530 |          |
| JP 2003524821 | W    | 20030819 | WO 2000US14602 | A    | 20000530 | 200356   |
|               |      |          | JP 2001500988  | A    | 20000530 |          |

Priority Applications (No Type Date): US 99136764 P 19990528

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200073941 A2 E 74 G06F-017/30  
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH  
CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE  
KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO  
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW  
AU 200055899 A Based on patent WO 200073941  
EP 1236129 A2 E G06F-017/30 Based on patent WO 200073941  
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI  
JP 2003524821 W 88 G06F-017/21 Based on patent WO 200073941

Abstract (Basic): WO 200073941 A2

NOVELTY - The set of interfaces are provided to create application object in registry and permitting developers to publish **XML** document in registry. A registry origin determines proper extensible style language ( **XSL** ) transformation based on type of the client and configuration. The transformed **XML** document is sent to the client, when proper transformation is confirmed.

DETAILED DESCRIPTION - The transformation engine maintains information of relationship between each of the **XSL** stylesheets and any other element such as application, client and configuration.

INDEPENDENT CLAIMS are also included for the following:

- (a) **XSL** document transformation system;
- (b) program for **XSL** transformation method

USE - In Internet.

ADVANTAGE - The transformation registry service allows different clients corresponding to applications to be configured, so that application can specify new clients overtime. Therefore, applications can dynamically evolved to support new and/or different client, configurations or transformations.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart for transformation registry service.

pp; 74 DwgNo 6/6

Title Terms: EXTEND; STYLE; LANGUAGE; TRANSFORM; DETERMINE; PROPER;  
TRANSFORM; BASED; CLIENT; TYPE; CONFIGURATION; ENABLE; APPLY; ACCESS;  
REGISTER; PROPER; TRANSFORM; CONFIRM

Derwent Class: T01

International Patent Class (Main): G06F-017/21 ; G06F-017/30

International Patent Class (Additional): G06F-012/00

File Segment: EPI

**Extensible style language transformation in Internet, by determining proper XSL transformation based on client type and configuration, to enable application to access registry on proper transformation confirmation**

Patent Assignee: SUN MICROSYSTEMS INC ...

Abstract (Basic):

... The set of interfaces are provided to create application object in registry and permitting developers to publish **XML** document in registry. A registry origin determines proper extensible style language

( XSL ) transformation based on type of the client and configuration.  
The transformed XML document is sent to the client, when proper  
transformation is confirmed.

... The transformation engine maintains information of relationship  
between each of the XSL stylesheets and any other element such as  
application, client and configuration. INDEPENDENT CLAIMS are also  
included for...

...a) XSL document transformation system...

...b) program for XSL transformation method...

International Patent Class (Main): G06F-017/21 ...

... G06F-017/30

International Patent Class (Additional): G06F-012/00

14/5,K/34 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013576185 \*\*Image available\*\*  
WPI Acc No: 2001-060392/200107  
XRPX Acc No: N01-045190

Document generation method using extensible style language style sheet in  
data processing system, by processing tags showing external component in  
style sheet related to input document

Patent Assignee: SUN MICROSYSTEMS INC (SUNM  
Inventor: YALCINALP L U  
Number of Countries: 021 Number of Patents: 004  
Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|---------------|------|----------|---------------|------|----------|----------|
| WO 200054174  | A1   | 20000914 | WO 2000US6379 | A    | 20000313 | 200107 B |
| EP 1218830    | A1   | 20020703 | EP 2000916254 | A    | 20000313 | 200251   |
|               |      |          | WO 2000US6379 | A    | 20000313 |          |
| US 6507857    | B1   | 20030114 | US 99123916   | P    | 19990312 | 200313   |
|               |      |          | US 2000523378 | A    | 20000310 |          |
| JP 2003521755 | W    | 20030715 | JP 2000604330 | A    | 20000313 | 200347   |
|               |      |          | WO 2000US6379 | A    | 20000313 |          |

Priority Applications (No Type Date): US 2000523378 A 20000310; US 99123916  
P 19990312

Patent Details:

| Patent No                                                                                 | Kind | Lan | Pg | Main IPC    | Filing Notes                        |
|-------------------------------------------------------------------------------------------|------|-----|----|-------------|-------------------------------------|
| WO 200054174                                                                              | A1   | E   | 29 | G06F-017/21 |                                     |
| Designated States (National): JP                                                          |      |     |    |             |                                     |
| Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU<br>MC NL PT SE    |      |     |    |             |                                     |
| EP 1218830                                                                                | A1   | E   |    | G06F-017/21 | Based on patent WO 200054174        |
| Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI<br>LU MC NL PT SE |      |     |    |             |                                     |
| US 6507857                                                                                | B1   |     |    | G06F-017/21 | Provisional application US 99123916 |
| JP 2003521755                                                                             | W    |     | 33 | G06F-017/21 | Based on patent WO 200054174        |

Abstract (Basic): WO 200054174 A1

NOVELTY - The style sheet containing tags and commands written in  
extensible style language ( XSL ) associated with input document is  
retrieved. The tags which represent the external component, are  
processed to generate a transform document. The external components are  
processed to obtain application specific results which are then  
included in the transform document.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

- (a) executing method of external components in the style sheet;
- (b) system for processing external components in the style sheet;
- (c) document generation program

USE - For generating transform document using extensible style

language ( **XSL** ) style sheet in data processing system.

ADVANTAGE - Enables using application program interface (API) which provides efficient access to the registers, without need for additional software or interface with the files.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the method for creating and processing external components in style sheet.

pp; 29 DwgNo 5/5

Title Terms: DOCUMENT; GENERATE; METHOD; EXTEND; STYLE; LANGUAGE; STYLE; SHEET; DATA; PROCESS; SYSTEM; PROCESS; TAG; EXTERNAL; COMPONENT; STYLE; SHEET; RELATED; INPUT; DOCUMENT

Derwent Class: T01

International Patent Class (Main): **G06F-017/21**

International Patent Class (Additional): **G06F-017/22 ; G06F-017/30**

File Segment: EPI

Patent Assignee: **SUN MICROSYSTEMS INC ...**

Abstract (Basic):

... The style sheet containing tags and commands written in ...  
extensible style language ( **XSL** ) associated with input document is  
retrieved. The tags which represent the external component, are  
processed to generate...

... For generating transform document using extensible style  
language ( **XSL** ) style sheet in data processing system...

International Patent Class (Main): **G06F-017/21**

International Patent Class (Additional): **G06F-017/22 ...**

... **G06F-017/30**

| Set | Items | Description                                                      |
|-----|-------|------------------------------------------------------------------|
| S1  | 400   | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -  |
|     |       | OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY  |
| S2  | 8468  | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-   |
|     |       | RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML |
|     |       | OR VCML                                                          |
| S3  | 16093 | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?           |
| S4  | 43    | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-    |
|     |       | PHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT? OR CODE? ? OR CODED)   |
| S5  | 4081  | SUN() MICROSYSTEMS                                               |
| S6  | 8507  | S1 OR S2                                                         |
| S7  | 2     | S6 AND S4                                                        |
| S8  | 7     | S3 AND S4                                                        |
| S9  | 9     | S7 OR S8                                                         |
| S10 | 0     | S9 AND S5                                                        |
| S11 | 5     | S9 NOT PY>1999                                                   |
| S12 | 5     | S11 NOT PD>19991021                                              |

File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Nov  
(c)2003 Info.Sources Inc

12/5/1

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00103175 DOCUMENT TYPE: Review

**PRODUCT NAMES:** IBM Cryptolope (595691)

**TITLE:** IBM's Digital Shrinkwrapper

**AUTHOR:** Loshin, Pete

**SOURCE:** Byte, v22 n8 p138(1) Aug 1997

**ISSN:** 0360-5280

**HOME PAGE:** <http://www.byte.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Review

**GRADE:** B

IBM InfoMarket's IBM Cryptolope electronic commerce technology packs content in a Cryptolope container. The consumer then downloads the Cryptolope, and sends a request to purchase content. The consumer payment is cleared, and the consumer receives a key to unlock Cryptolope. The consumer then opens the Cryptolope content. Cryptolope technologies will not be in products until late in 1997. Cryptolope combines encryption and digital signatures to ensure that a digital product can be transported and copied freely, but only after a payment is made. Cryptolope should prevent pirates from quickly and precisely copying digital products, such as news stories, books, music, pictures, or video. However, it will be designed to be minimally intrusive to users' activities. The Opener browser plug-in is required to open containers, and Opener works with Microsoft's Microsoft Internet Explorer and Netscape Communications' Netscape Navigator on Windows; a Java edition is planned. During testing, the beta code used did pack encrypted, compressed, and digitally signed files into a Cryptolope container. No facility for opening or previewing files was implemented, but users could drag-and-drop a file into any **part** of the **Cryptolope** and save a **template** of the Cryptolope. Other features will be added to the final release.

**COMPANY NAME:** IBM Corp (351245)

**SPECIAL FEATURE:** Screen Layouts Charts

**DESCRIPTORS:** Computer Security; Content Providers; Content Subscription;  
Digital Signatures; E-Payment; Electronic Publishing; Encryption

**REVISION DATE:** 20010330

12/5/2

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00096727 DOCUMENT TYPE: Review

**PRODUCT NAMES:** Introduction to Programming Java Applets (641863)

**TITLE:** MindQ's Introduction to...Java Targets Entry-Level to Pro Users

**AUTHOR:** Chernicoff, David

**SOURCE:** Computer Shopper, v16 n11 p290(1) Nov 1996

**ISSN:** 0886-0556

**HOME PAGE:** <http://www.computershopper.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Review

**GRADE:** B

MindQ Publishing's Introduction to Programming Java Applets is designed for beginners and experienced programmers alike. The CD-ROM-based tool is the first of a projected series of interactive titles describing Java programming. Over 2,000 topics are covered, including **Hypertext Markup**

**Language** ( HTML ) and Java, events and threads, and control structure. Many instructive animations and pop-ups are included, and the CD is designed to be comprehensive enough to be used by programmers with all levels of experience, including those who have never programmed before and programmers who want to learn object-oriented (OO) programming. However, the attempt to appeal to such a broad-based audience does not fully succeed because experienced developers' information is mixed right in with beginners' information in the introductory sections. Otherwise, the development environment provided allowed users to select parts of the learning process most useful for their particular levels of knowledge. Procedural programmers can learn from comprehensive coverage of object-oriented (OO) programming, including discussions of Superclass methodologies and polymorphism. Code sample allow users to construct Java applets to do basic animations, and the tutorial reformats the original Java **code** as **part** of a more advanced applet that allowed users to customize animation output.

PRICE: \$50

COMPANY NAME: MindQ Publishing (611514)  
SPECIAL FEATURE: Charts Screen Layouts  
DESCRIPTORS: CD-ROMs; E-Learning; HTML ; Internet Utilities; Java; OOP  
(Object Oriented Programming); Programming Languages; Training  
REVISION DATE: 20020228

12/5/3

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00088819 DOCUMENT TYPE: Review

PRODUCT NAMES: Company--FileNET Corp (850586); Company--Saros Corp  
(860891)

TITLE: Workflow giant FileNet snaps up Saros  
AUTHOR: Cole, Barb  
SOURCE: Network World, v13 n5 p42(1) Jan 29, 1996  
ISSN: 0887-7661  
HOMEPAGE: <http://www.nwfusion.com>

RECORD TYPE: Review  
REVIEW TYPE: Company

FileNet recently acquired Saros, a maker of **document** management software, in order to give customers single-vendor support for networked workflow, imaging, and **document** management products. FileNet is now a competitor to IBM and Wang Labs, which currently dominate the market for larger imaging systems. FileNet will make Saros **document** management **code** **part** of an integrated product suite that offers **document** imaging software from Watermark Software, as well as workflow and **document** management programs. Also included is Computer Output to Laser Disc (COLD) technology purchased from Greener Software. COLD archives **documents** from mainframes or magnetic and optical disks. Saros sells 10,000-seat licenses, while FileNet focused on supporting departmental needs. The products are designed to allow customers to manage unstructured data over enterprise networks and the Internet.

COMPANY NAME: FileNET Corp (459151); Saros Corp (468614)  
SPECIAL FEATURE: Graphs  
DESCRIPTORS: Document Management; Image Storage; Optical Discs; Workflow  
REVISION DATE: 20020703

12/5/4

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00078925

DOCUMENT TYPE: Review

**PRODUCT NAMES:** QuickDraw 3D 1.0 (371556)

**TITLE:** 3-D Is Target of New Software, Hardware Technologies

**AUTHOR:** Heck, Mike

**SOURCE:** InfoWorld, v17 n23 p67(1) Jun 5, 1995

**ISSN:** 0199-6649

**HOME PAGE:** <http://www.infoworld.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Product Analysis

**GRADE:** Product Analysis, No Rating

Apple Computer's QuickDraw 3D 1.0, a platform-neutral 3D rendering engine, will help place 3D functions in the hands of just about all users in the near future. It uses a metafile format that allows users to work with many applications and platforms. Applications supporting QuickDraw 3D on any platform can modify 3D graphics in documents. Other unique features include standard 3D building blocks, such as complex polygons, mesh, and nonuniform rational B-spline curves, for better speed. Various hardware manufacturers, including Matrox Graphics, support QuickDraw. Microsoft licensed Silicon Graphics Open-GL 3D API, making the code part of Windows 95. The module works like QuickDraw to offload 3D processing to the operating system. Other developers, including Autodesk and Ithaca Software, sell a UNIX development kit for HOOPS, a platform-neutral programming library for 2D/3D graphics applications.

**COMPANY NAME:** Apple Computer Inc (114936)

**DESCRIPTORS:** 3D Graphics; Apple Macintosh; Draw; Graphics Tools; Image Processing; MacOS

**REVISION DATE:** 20001130

12/5/5

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.

(c)2003 Info.Sources Inc. All rts. reserv.

00070249

DOCUMENT TYPE: Review

**PRODUCT NAMES:** Company--Netscape Communications Corp (858498)

**TITLE:** Start-up Offers New Tools to do Business on Internet

**AUTHOR:** Messmer, Ellen

**SOURCE:** Network World, v11 n37 p12(1) Sep 12, 1994

**ISSN:** 0887-7661

**HOME PAGE:** <http://www.nwfusion.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Company

Netscape Communications offers two Mosaic software products that increase the ability of companies to conduct business via the Internet. NetSite Communications Server and NetSite Commerce Server present multimedia-based data with added encryption and authorization security for business transactions. The two products allow users to post catalogs or other documents that do not require security, or to allow purchasers to send such data as credit card numbers in a secure environment. Marc Andreessen, the developer of the first Mosaic research code, is part of the Netscape Communications team. Mark Koontz, VP of marketing for the startup, says that NetSite works with all Mosaic client software, while NetScape provides security functions. The San Jose Mercury News, a west coast newspaper, will be offered in Fall 1994, via the Internet with Mosaic.

**COMPANY NAME:** Netscape Communications Corp (592625)

**DESCRIPTORS:** Computer Security; Internet Security; Multimedia; Software



Marketing  
REVISION DATE: 20020703

| Set  | Items                               | Description                                                                                                                                   |
|------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| S1   | 4517                                | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -<br>OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY            |
| S2   | 50337                               | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-<br>RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML<br>OR VCML |
| S3   | 388734                              | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?                                                                                        |
| S4   | 2604                                | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-<br>PHER? OR ENCIPHER? OR ENCYIPHER? OR CRYPT? OR CODE? ? OR CODED)              |
| S5   | 7627                                | SUN() MICROSYSTEMS                                                                                                                            |
| S6   | 429260                              | S1 OR S2 OR S3                                                                                                                                |
| S7   | 79                                  | S6 AND S4                                                                                                                                     |
| S8   | 0                                   | S7 AND S5                                                                                                                                     |
| S9   | 845                                 | S6 AND S5                                                                                                                                     |
| S10  | 5                                   | S1 AND S2 AND S3 AND S5                                                                                                                       |
| S11  | 63                                  | S7 NOT PY>1999                                                                                                                                |
| S12  | 63                                  | S11 NOT PD>19991021                                                                                                                           |
| S13  | 50                                  | RD (unique items)                                                                                                                             |
| S14  | 0                                   | S7 AND S5                                                                                                                                     |
| S15  | 2                                   | S10 NOT, PY>1999                                                                                                                              |
| File | 8: Ei Compendex(R)                  | 1970-2003/Nov W5<br>(c) 2003 Elsevier Eng. Info. Inc.                                                                                         |
| File | 35: Dissertation Abs Online         | 1861-2003/Oct<br>(c) 2003 ProQuest Info&Learning                                                                                              |
| File | 202: Info. Sci. & Tech. Abs.        | 1966-2003/Nov 17<br>(c) 2003 EBSCO Publishing                                                                                                 |
| File | 65: Inside Conferences              | 1993-2003/Dec W1<br>(c) 2003 BLDSC all rts. reserv.                                                                                           |
| File | 2: INSPEC                           | 1969-2003/Nov W5<br>(c) 2003 Institution of Electrical Engineers                                                                              |
| File | 233: Internet & Personal Comp. Abs. | 1981-2003/Jul<br>(c) 2003, EBSCO Pub.                                                                                                         |
| File | 94: JICST-EPlus                     | 1985-2003/Dec W1<br>(c) 2003 Japan Science and Tech Corp(JST)                                                                                 |
| File | 99: Wilson Appl. Sci & Tech Abs     | 1983-2003/Oct<br>(c) 2003 The HW Wilson Co.                                                                                                   |
| File | 95: TEME-Technology & Management    | 1989-2003/Nov W4<br>(c) 2003 FIZ TECHNIK                                                                                                      |
| File | 583: Gale Group Globalbase(TM)      | 1986-2002/Dec 13<br>(c) 2002 The Gale Group                                                                                                   |

15/5/1 (Item 1 from file: 233)  
DIALOG(R) File 233:Internet & Personal Comp. Abs.  
(c) 2003, EBSCO Pub. All rts. reserv.

00528679 99IE03-221

**Sun, Adobe offer cash for creativity, via XML development competitions**

Luh, James C; Caulfield, Brian

Internet World , March 15, 1999 , v5 n10 p45, 1 Page(s)

ISSN: 1081-3071

Company Name: Sun Microsystems ; Adobe Systems; IBM Corp.;  
Arbortext

URL: <http://www.sun.com> <http://www.adobe.com> <http://www.alphaWorks.ibm.com/tech/xeena> <http://www.alphaWorks.ibm.com/tech/xml4j>

Product Name: Xeena; XML Parser for Java

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Reports on the proceedings of the Xtech '99 conference in San Jose, CA. Says that Sun Microsystems has launched a \$30,000 contest to build Extensible Style Language (XSL) ``formatting capability into Netscape's Mozilla open-source Web browser.'' Explains that XSL is a standard for processing Extensible Markup Language (XML) document structures. Notes that Sun and Adobe Systems have launched a \$60,000 contest to create a batch formatter in Java that produces Portable Document Format (PDF) docs from XML docs. Adds that the winners would exhibit their final work at the XML '99 conference at the end of the year. Says that the contest would enhance Mozilla's ability to compete with Microsoft Internet Explorer 5.0. Mentions other developments, including Sun's creation of standard extensions to Java for XML, IBM's release of Java-based XML editor called Xeena and XML Parser for Java upgrade, and Arbortext's Epic XML upgrade. Includes one sidebar. (MEM)

Descriptors: XML ; Standards; Contests; Web Browsers; Java; Conference; Product Development

Identifiers: Xeena; XML Parser for Java; Sun Microsystems ;  
Adobe Systems; IBM Corp.; Arbortext

15/5/2 (Item 2 from file: 233)  
DIALOG(R) File 233:Internet & Personal Comp. Abs.  
(c) 2003, EBSCO Pub. All rts. reserv.

00498376 98IT06-033

**Adobe submits proposal of Precision Graphics Markup Language (PGML) specification to W3C**

Information Today , June 1, 1998 , v15 n6 p41, 1 Page(s)

ISSN: 8755-6286

Company Name: Adobe Systems

URL: <http://www.w3.org/Submission> <http://www.adobe.com>

Product Name: PGML Specification

Languages: English

Document Type: Product Announcements

Geographic Location: United States

Announces that Adobe Systems Inc. has submitted to the World Wide Web Consortium a PGML specification for vector graphics developed in conjunction with IBM, Netscape, and Sun Microsystems. Reports that PGML provides precise control of layout, fonts, color, and printing, and produces graphics that are scalable and faster to download than bitmap images. Adds that it also brings the ability to support searchable text to graphics file formats. Says PGML is compatible with Document Object Model, Cascading Style Sheets, and eXtensible Markup Language, as well as all leading drawing and illustration programs, including Adobe Illustrator and CorelDRAW. Notes that end users of PGML Web content will benefit from faster downloads, resolution-independent printing, animation, and special effects, all without needing plug-ins. (JC)

Descriptors: Web Tools; Standards; Graphics

Identifiers: PGML Specification; Adobe Systems

13/5/1 (Item 1 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04312112 E.I. No: EIP95122967425

**Title: Enhancing the use of Eurocode No 8 through hypertext and expert system technology**

Author: Koumoussis, V.K.; Georgiou, P.C.; Gantes, C.J.; Dimou, C.K.

Corporate Source: Natl Technical Univ of Athens, Athens, Greece

Source: Advances in Engineering Software v 23 n 2 1995. p 69-81

Publication Year: 1995

CODEN: AESODT ISSN: 0965-9978

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review); T; (Theoretical)

Journal Announcement: 9602W3

**Abstract:** In this work, a general scheme is presented for the representation of Structural Design Codes in the form of **hypertext** and expert systems. This scheme is employed for Eurocode No 8, issued by the Commission of the European Communities, that contains the requirements for designing and erecting seismic-resistant structures. This code has, mainly, a complementary function to that of other Eurocodes that specify the requirements for the design of buildings made of different materials like concrete, steel, etc. There are many cross-references between Eurocode No 8 and the other Eurocodes, whereas Eurocode No 8 itself is divided into several parts that are strongly interrelated. The difficulty for the readers to grasp the overall structure and philosophy of the code, and establish the interconnection between its provisions is overcome by using the code in the form of a **hypertext** and expert system. The proposed scheme can be extended to incorporate the algorithmic **part** of the **code** following the logical approach. This concept can be implemented using Prolog language. The techniques employed herein can be generalized for other code-type documents and specifications. Moreover, such systems can be developed in parallel to the code **document** providing a valuable tool to expert committees. (Author abstract) 40 Refs.

**Descriptors:** \*Building codes; Structural design; Computer software; Expert systems; Earthquake resistance; Algorithms; PROLOG (programming language); Specifications; Software engineering; Data processing

**Identifiers:** **Hypertext**; Structural code processing

**Classification Codes:**

723.4.1 (Expert Systems); 723.1.1 (Computer Programming Languages)  
902.2 (Codes & Standards); 408.1 (Structural Design, General); 723.1 (Computer Programming); 723.4 (Artificial Intelligence); 484.3 (Earthquake Resistance)

902 (Engineering Graphics & Standards); 408 (Structural Design); 723 (Computer Software); 484 (Seismology)

90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 48 (ENGINEERING GEOLOGY)

13/5/2 (Item 2 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04278688 E.I. No: EIP95102904849

**Title: Temporal event analysis and program understanding**

Author: Howden, W.E.; Shi, G.M.

Corporate Source: Univ of Hawaii, Honolulu, HI, USA

Conference Title: Proceedings of the 19th Annual International Computer Software and Applications Conference COMPSAC '95

Conference Location: Dallas, TX, USA Conference Date: 19950809-19950811

Sponsor: IEEE

E.I. Conference No.: 43840

Source: Proceedings - IEEE Computer Society's International Computer Software & Applications Conference 1995. IEEE, Los Alamitos, CA, USA, 95CB35838. p 4-11

Publication Year: 1995

CODEN: PSICD2 ISSN: 0730-6512

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9512W4

Abstract: A temporal event analysis approach to program understanding is described. Program understanding is viewed as a sequence of episodes in which the programmer concludes that an informal event occurs that corresponds to some part of the code. This can be viewed as accepting that the code is an adequate definition of the meaning of the informal event. Often, such a definition is contingent upon working hypotheses that describe other informal program properties that should be verified in order to confirm the validity of the understanding process. Verification of working hypotheses may depend on the formulation of additional definitions or working hypotheses. The understanding process can be assisted through the use of a documentation language for describing events and hypotheses, and an hypothesis verification tool. This paper describes a temporal event language in which hypotheses are formulated in terms of expected event sequences. An hypothesis verification tool was built, and experimentation was carried out on a set of programs. The tool was found to be very useful in understanding the detailed, control oriented aspects of a program. Program faults were discovered in every program that was analyzed, indicating that it facilitates a deep level of understanding. (Author abstract) 15 Refs.

Descriptors: Program documentation ; Computer programming languages; Computer software selection and evaluation; Computer aided software engineering

Identifiers: Temporal event analysis; Program understanding; Hypothesis verification tool

Classification Codes:

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming)

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/3 (Item 3 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04241397 E.I. No: EIP95092839442

Title: Customized tools for software quality assurance and reengineering

Author: Wells, Charles H.; Brand, Russell; Markosian, Lawrence

Corporate Source: Electric Power Research Inst, Palo Alto, CA, USA

Conference Title: Proceedings of the 2nd Working Conference on Reverse Engineering

Conference Location: Toronto, Ont, Can Conference Date: 19950714-19950716

Sponsor: IEEE; ACM/SIGSOFT

E.I. Conference No.: 43484

Source: Reverse Engineering - Working Conference Proceedings 1995. IEEE, Los Alamitos, CA, USA, 95TB8101. p 71-77

Publication Year: 1995

CODEN: 002111

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications)

Journal Announcement: 9510W5

Abstract: This paper describes a new approach to developing tools for measuring and documenting source code compliance with design and coding standards. It also presents preliminary results of applying this approach to software developed for the electrical utility industry. The approach is based on an enabling technology for software evaluation and reengineering. The key technical ideas underlying the technology are to represent source code in the form of abstract syntax trees in an object-oriented database, and to use a library of utilities to analyze software represented in this way. This enabling technology supports rapid implementation and testing of customized design and coding standards. The standards were defined by the Electric Power Research Institute (EPRI). We describe a prototype toolset

that we have used for measuring compliance of over 3 million lines of C and Fortran source code as part of evaluating legacy systems that are being reengineered, as well as for performing quality assurance of new applications. (Author abstract) 8 Refs.

Descriptors: \*Computer aided software engineering; Quality assurance; Codes (symbols); Computer software; Software engineering; Object oriented programming; Database systems; Program debugging; FORTRAN (programming language); COBOL (programming language)

Identifiers: Customized tools; Reengineering; Abstract syntax trees; Source code; Coding standards; Software evaluation; Software testing

Classification Codes:

723.1.1 (Computer Programming Languages)

723.5 (Computer Applications); 913.3 (Quality Assurance & Control);

723.1 (Computer Programming); 723.3 (Database Systems)

723 (Computer Software); 913 (Production Planning & Control)

72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

13/5/4 (Item 4 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04076975 E.I. No: EIP95022585330

**Title:** Intelligent CNC cutting of sheet metal parts using machine vision

**Author:** Allada, Venkat; Anand, Sam; Chu, Yean-Chu

**Corporate Source:** Univ of Cincinnati, Cincinnati, OH, USA

**Source:** International Journal of Industrial Engineering - Applications and Practice v 1 n 4 Dec 1994. p 305-314

**Publication Year:** 1994

**CODEN:** 001612 **ISSN:** 1072-4761

**Language:** English

**Document Type:** JA; (Journal Article) **Treatment:** A; (Applications)

**Journal Announcement:** 9504W4

**Abstract:** The present study demonstrates the application of reverse engineering methods for cutting sheet metal parts from a stock sheet. The impetus for this study was the work done at a local sheet metal company which had switched from conventional mechanical press operations to CNC laser cutting operations. A user-friendly system, 'LAYCUT', (coded in Turbo Pascal, Borland C plus plus, and Auto Lisp) was developed for day-to-day use at the local company. The system is capable of automatically generating the stock-sheet layout and subsequently the NC-code. As an extension to 'LAYCUT', the system 'LAYCUT-II' was developed. 'LAYCUT-II' demonstrates the application of reverse engineering concepts in sheet metal operations. This system uses a simple machine vision system to acquire the image of a **template** part model. The image is then raster scanned and the boundary encoding performed. The Hough transform method is then used for detecting the vertices of the polygonal part. This geometric information (vertices) is used to automatically generate CAD models (in AutoCAD) and the DXF formatted files of the sheet metal parts. The DXF file is then used to drive the automated stock-sheet layout module and the automated **part NC-code** generation module. (Author abstract) 14 Refs.

Descriptors: \*Computer vision; Metal cutting; Sheet metal; Operations research; Automation; Computer software; Computer aided manufacturing; Mathematical transformations; Computer aided design

Identifiers: Reverse engineering methods; Mechanical press operations; Laser cutting operation; Machine vision; Hough transform; NC code generation

Classification Codes:

913.4.2 (Computer Aided Manufacturing)

723.5 (Computer Applications); 531.1 (Metallurgy); 912.3 (Operations Research); 913.4 (Manufacturing); 921.3 (Mathematical Transformations)

723 (Computer Software); 531 (Metallurgy & Metallography); 912 (Industrial Engineering & Management); 913 (Production Planning & Control); 921 (Applied Mathematics)

72 (COMPUTERS & DATA PROCESSING); 53 (METALLURGICAL ENGINEERING); 91 (ENGINEERING MANAGEMENT); 92 (ENGINEERING MATHEMATICS)

13/5/5 (Item 5 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03800459. E.I. No: EIP94021216647

**Title: Synthesis of single-level circuits for microprogrammed automata from programmable logic arrays**

Author: Solov'ev, V.V.

Source: Avtomatika i Vychislitel'naya Tekhnika n 1 Jan-Feb 1993. p 14-20

Publication Year: 1993

CODEN: AVYTAK ISSN: 0132-4160

Language: Russian

Document Type: JA; (Journal Article) Treatment: A; (Applications)

Journal Announcement: 9404W1

Abstract: A method using programmable logic arrays (PLA) for the synthesis of single-level circuits for microprogrammed automata (MPA) whose behaviour is described in the language of algorithm graph diagrams is considered. The single-level circuit structure proposed allows to use efficiently the structural features of programmable logic arrays. For this purpose, the memory of the microprogrammed automata is implemented on the output PLA registers, and the internal feedback circuits of each PLA are used for analyzing part of the code of internal MPA states. As a result, the necessity to use external memory components is eliminated, and the total number of inputs and outputs in the system is increased. Estimates for the characteristics of the structure proposed are given in comparison with a similar PLA circuit. The method of synthesis is based on the decomposition of the MPA jump table and a special coding of internal MPA states. 5 Refs.

Descriptors: Microprogramming; Computer programming; Flowcharting; Automata theory; Formal logic; Algorithms; System program documentation

Identifiers: Automata circuits; Programmable logic arrays

Classification Codes:

721.3 (Computer Circuits); 723.1 (Computer Programming); 723.3 (Database Systems)

721 (Computer Circuits & Logic Elements); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/6 (Item 6 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03626433 E.I. No: EIP93050805460

**Title: CDA: A system for understanding the dynamic properties of data processing programs**

Author: Howden, William E.; Shi, Guangming

Corporate Source: Univ of California at San Diego, San Diego, CA, USA

Conference Title: Proceedings of the 1992 Symposium on Assessment of Quality Software Development Tools

Conference Location: New Orleans, LA, USA Conference Date: 19920527

Sponsor: IEEE Computer Soc; Tulane Univ

E.I. Conference No.: 17722

Source: Symposium on Assessment of Quality Software Development Tools Proc 92 Symp Assess Qual Software Dev Tools 1992. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. p 310-319

Publication Year: 1992

ISBN: 0-8186-2620-8

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications); G; (General Review)

Journal Announcement: 9306W4

Abstract: During software maintenance, it is of critical importance for maintenance staff to understand how a system works and when they make a change to part of the system, what effects this change will have on other parts of the system. It is our observation that much of the program understanding process revolves around dynamic properties such as the

states, state sequences and state transition operations. Hence, it is necessary to support the understanding process when the staff is reasoning about what could take place when the program is in operation and what could happen if **part** of the **code** is modified. CDA is a system for understanding the dynamic properties of large data processing programs. It allows the user to incrementally **document** their understanding of a program as working hypotheses and abstract operations with CDA comments. It then verifies these hypotheses to determine if they are justified. The justified hypotheses and abstract operations form an incremental specification of the program. Over time, the **documentation** improves in quality and completeness as new comments are added to justify and check the assumptions underlying new changes made to the code. (Author abstract) 3 Refs.

Descriptors: Computer aided software engineering; Computer systems programming; Computer software; Data processing; Computer programming; Program **documentation** ; COBOL (programming language); Maintenance; Programming theory

Identifiers: COBOL dynamics analyzer (CDA); Program understanding tool; Dynamic properties

Classification Codes:

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming); 723.2 (Data Processing)

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/7 (Item 7 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03576452 E.I. Monthly No: EIM9303-016565

**Title: Computer aided modeling of families and family members of designed parts.**

Author: Johannesson, H. L.

Corporate Source: Chalmers Univ of Technology, Goteborg, Sweden

Conference Title: 18th Annual ASME Design Automation Conference

Conference Location: Scottsdale, AZ, USA Conference Date: 19920913

Sponsor: ASME

E.I. Conference No.: 17560

Source: Advances in Design Automation - 1992 American Society of Mechanical Engineers, Design Engineering Division (Publication) DE v 44 pt 2. Publ by ASME, New York, NY, USA. p 173-179

Publication Year: 1992

CODEN: AMEDEH

Language: English

Document Type: PA; (Conference Paper) Treatment: T; (Theoretical)

Journal Announcement: 9303

Abstract: In the present paper a computer based method for modeling of families and family members of designed parts is suggested and presented. The product models that are built, contain 'rules' for generating geometric models of part members plus nongeometric information to be used when manufacturing the parts. The geometric design 'rules', that are stored in the part family data base, consist of normalized line and arc defining data to be used when generating geometry defining cross section part contours. These geometry defining data are generated automatically by the user when drawing contours in a CAD-system that is able to record the users actions, and generate the corresponding macro code. This code is interpreted by a part family storage program that stores both the interpreted geometric information, and user entered nongeometric information in the part family data base. When creating a part family member, the stored part family data, plus data defining interacting standard components, are retrieved from data bases. The nongeometric data are written on **document** files, and a 3-D solid geometric model of the part member is created in the used CAD-system by extruding and/or rotating part member and standard component interface geometry contours. (Author abstract) 18 Refs.

Descriptors: \*MECHANISMS; MACHINE DESIGN; MATHEMATICAL MODELS; COMPUTER SIMULATION; COMPUTER AIDED MANUFACTURING; COMPUTER AIDED DESIGN; CODES



(SYMBOLS)

Identifiers: MACRO CODE ; PART FAMILY STORAGE PROGRAM

Classification Codes:

601 (Mechanical Design); 921 (Applied Mathematics); 723 (Computer Software); 913 (Production Planning & Control)

60 (MECHANICAL ENGINEERING); 92 (ENGINEERING MATHEMATICS); 72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

13/5/8 (Item 8 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All its. reserv.

03361678 E.I. Monthly No: EI9201001273

**Title: Internally developed medical equipment management system. A viable alternative.**

Author: Lafrenaye, Raymond R.; Pezzullo, John C.

Corporate Source: Rhode Island Hospital, Providence, RI, USA

Source: Journal of Clinical Engineering v 16 n 4 Jul-Aug 1991 p 315-321

Publication Year: 1991

CODEN: JCEND7 ISSN: 0363-8855

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review); A; (Applications)

Journal Announcement: 9201

Abstract: A medical equipment management computer system, internally developed by Rhode Island Hospital, is presented. Hospital biomedical engineering departments must contend with ever-increasing regulatory requirements for patient-care equipment. Computerization is a viable solution to meeting the **documentation** standards dictated by healthcare governing bodies. Rhode Island Hospital's system consists of a Macintosh computer, Panorama database software, and Psion LZ64 Organizer handheld computer. Files were set up on equipment data, JCAHO-required historical **documentation**, service, inspections, **part codes** and locations, and vendor contact information. Technician inspection data recording time was reduced by approximately 30%. (Author abstract) 1 Ref.

Descriptors: \*BIOMEDICAL EQUIPMENT--\*Management; DATABASE SYSTEMS--Medical Applications; COMPUTER SOFTWARE

Identifiers: COMPUTERIZED EQUIPMENT MANAGEMENT; COMPUTERIZED RECORDS; SOFTWARE PACKAGE PANORAMA; MACINTOSH COMPUTER

Classification Codes:

462 (Medical Engineering & Equipment); 723 (Computer Software)

46 (BIOENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

13/5/9 (Item 9 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02783154 E.I. Monthly No: EI8909091244

**Title: ARMP-02 documentation . Part II. Chapter 1: Code summary.**

Author: Anon

Source: Electric Power Research Institute (Report) EPRI NP v PT2 n 4574-CCM Aug 1988 40p

Publication Year: 1988

CODEN: ERNPD6

Language: English

Document Type: RR; (Report Review) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8909

Abstract: An introduction to part II of the ARMP-02 system, this chapter abstracts from the other chapters contained in **part II: 12 code** manuals and associated neutron cross-section library descriptions. Implementation of the ARMP-02 system helps utilities model LWR cores for core follow, operations support, in-core fuel management, and preparation of databases for transient calculations. Part II of the ARMP-02 system required code manuals in standard three-volume format, as well as chapters on the

associated neutron cross-section libraries. After preparation of this **documentation**, a summary chapter was written to provide an overview of part II. (Edited author abstract)

Descriptors: \*NUCLEAR REACTORS, LIGHT WATER--\*Cores; COMPUTER SOFTWARE; DATABASE SYSTEMS; NUCLEAR FUELS--Management

Identifiers: REACTOR LATTICES; REACTOR PHYSICS; SOFTWARE PACKAGE ARMP-02

Classification Codes:

621 (Nuclear Reactors); 723 (Computer Software); 622 (Radioactive Materials)

62 (NUCLEAR TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING)

13/5/10 (Item 10 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02783152 E.I. Monthly No: EI8909091215

Title: **ARMP-02 documentation . Part II. Chapter 4: The EPRI-CPM data library.**

Author: Anon

Source: Electric Power Research Institute (Report) EPRI NP v PT2 n 4574-CCM Aug 1988 68p

Publication Year: 1988

CODEN: ERNPD6

Language: English

Document Type: RR; (Report Review) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8909

Abstract: The CPM-2 and MICBURN-E codes, part of the ARMP-02 system, use the same neutron cross-section library. These codes are generally used in tandem to model BWR assemblies for a variety of calculations essential to core follow, operations support, in-core fuel management, and preparation of databases for transient calculations. The EPRI-CPM library contains microscopic cross sections in 69 energy groups for 66 elements. Six library subfiles include group cross sections for different temperatures, resonance integrals for different potential scattering cross sections and temperatures, fission-product yields, and decay constants. This chapter describes library modifications and record structure and contains data tabulations. (Edited author abstract)

Descriptors: \*NUCLEAR REACTORS, BOILING WATER--\*Cores; COMPUTER SOFTWARE; DATABASE SYSTEMS; NUCLEAR FUELS--Management

Identifiers: REACTOR PHYSICS; REACTOR LATTICES; SOFTWARE PACKAGE ARMP-02

Classification Codes:

621 (Nuclear Reactors); 723 (Computer Software); 622 (Radioactive Materials)

62 (NUCLEAR TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING)

13/5/11 (Item 11 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02121308 E.I. Monthly No: EIM8609-064845

Title: **STANDARD HYDROMETEOROLOGICAL EXCHANGE FORMAT (SHEF) AND ITS APPLICATION IN THE PACIFIC NORTHWEST.**

Author: Pasteris, Phillip A.; Bissell, Vernon C.

Corporate Source: NOAA, NWS, Northwest River Forecast Cent, Portland, OR, USA

Conference Title: International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology (Preprints of Papers).

Conference Location: Los Angeles, CA, USA Conference Date: 19850107

Sponsor: American Meteorological Soc, Boston, MA, USA; WMO, Geneva, Switz; Office of the Federal Coordinator for Meteorological Services & Supporting Research, Washington, DC, USA

E.I. Conference No.: 08280

Source: Publ by American Meteorological Soc, Boston, MA, USA p 9-13

Publication Year: 1985

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8609

Abstract: The Standard Hydrometeorological Exchange Format (SHEF) code is a major step in the modernization. The SHEF is simply a **documented** set of rules for coding of operational data in a form for both visual and computer recognition. It is specifically for day-to-day use, and is not designed for historical or archival data transfer. All the critical elements for identification of data are covered. Station identifiers (and perhaps location), parameter descriptors, time encoding conventions, unit and scale conventions, and comment fields are all **part** of the **code**. Design requirements of the SHEF include interagency sharing of data, visual and machine readability, and compatibility with anticipated receiving databases. The SHEF code is now being implemented by the U. S. National Weather Service nationwide for hydrological data exchange between NWS offices, and is already a foundation for several interagency data exchange agreements. 8 refs.

Descriptors: \*HYDROLOGY--\*Standards; DATA PROCESSING--Code Converters; CODES; SYMBOLIC--Standards

Identifiers: HYDROMETEOROLOGICAL EXCHANGE FORMAT; STANDARD FORMAT

Classification Codes:

444 (Water Resources); 471 (Marine Science & Oceanography); 902 (Engineering Graphics & Standards); 723 (Computer Software); 731 (Automatic Control Principles); 901 (Engineering Profession)

44 (WATER & WATERWORKS ENGINEERING); 47 (OCEAN TECHNOLOGY); 90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

13/5/12 (Item 12 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02098786 E.I. Monthly No: EIM8606-040658

Title: **COMPUTER-AIDED SOLDERABILITY TESTING FOR RECEIVING INSPECTION.**

Author: Davy, J. Gordon; Skold, Randy

Corporate Source: Westinghouse Defense Cent, Baltimore, MD, USA

Conference Title: Proceedings of the Technical Conference - IEPS, Fourth Annual International Electronics Packaging Conference.

Conference Location: Baltimore, MD, USA Conference Date: 19841029

Sponsor: Int Electronics Packaging Soc, Glen Ellyn, IL, USA

E.I. Conference No.: 06732

Source: Publ by Int Electronics Packaging Soc, Glen Ellyn, IL, USA p 659-674

Publication Year: 1984

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8606

Abstract: The recent availability of a wetting balance which can be easily interfaced to a microcomputer has made possible a practical receiving inspection solderability test for component leads that avoids the subjectivity of the present dip-and-look test. The wetting balance, in effect, detects the size and shape of the solder meniscus on the lead. Since it is the solder meniscus more than the degree of coverage that is evaluated by inspectors of the completed solder joint, the wetting balance provides a more realistic test of how well the components will perform on the PWA. The software that has been developed for the wetting balance is designed to make it easy for inspection workers to perform the test with a minimum of training. It asks for identification of the **part**, manufacturer, date **code**, purchase order number, etc., so that the final results are adequately **documented**. Use of a computer to present the results means that the wetting force as a function of time can be plotted as a normalized curve (automatically accounting for differences in number and size of leads), and also that the results can be accumulated in a factory computer for statistical quality control. (Edited author abstract) 20 refs.

Descriptors: \*ELECTRONIC EQUIPMENT--\*Computer Applications; COMPUTERS, MICROCOMPUTER--Applications; SOLDERING--Computer Applications  
Identifiers: COMPUTER-AIDED SOLDERABILITY TESTING; RECEIVING INSPECTION; CAUSES OF POOR SOLDERABILITY; WETTING BALANCE TESTING; ACCELERATED AGING; ASSEMBLY FLOW DIAGRAM

Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 715 (General Electronic Equipment); 718 (Telephone & Line Communications); 723 (Computer Software); 722 (Computer Hardware); 538 (Welding & Bonding)  
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 53 (METALLURGICAL ENGINEERING)

13/5/13 (Item 13 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

01788728 E.I. Monthly No: EI8508070603 E.I. Yearly No: EI85091232

Title: **AUTOMATED PROCESS DESIGN SYSTEM.**

Author: Katsnel'son, A. I.

Source: Sov Energy Technol n 5 1984 p 69-71

Publication Year: 1984

CODEN: SETEDW

Language: ENGLISH

Document Type: JA; (Journal Article) Treatment: X; (Experimental)

Journal Announcement: 8508

Abstract: An original automated system for developing blade machining processes is described. The system is suitable for parts of any configuration. The design process begins with the coding of information on the initial blank and the part. At this time, types and sizes previously used are given designations and determinations according to special rules. For parts which have already been in production, the **coded part** and initial blank information are entered into the computer. The computer then produces a set of technical **documentation**, at a rate of 20 operations per hour. The **documentation** set includes: a) a **document** list; b) a routing and operations chart; c) a ketch chart; and d) a tooling list.

Descriptors: \*PROCESS CONTROL--\*Computer Applications; TURBOMACHINERY--Blades

Identifiers: AUTOMATED PROCESS DESIGN

Classification Codes:

731 (Automatic Control Principles); 723 (Computer Software); 632 (Hydraulics & Pneumatics)

73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 63 (FLUID DYNAMICS & VACUUM TECHNOLOGY)

13/5/14 (Item 14 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00581519 E.I. Monthly No: EI7611072842 E.I. Yearly No: EI76013567

Title: **GENERATING AN INTERMEDIATE-CODE GENERATOR IN A COMPILER-WRITING SYSTEM.**

Author: Ripken, Knut

Corporate Source: Tech Univ, Munich, Ger

Source: Int Comput Symp, Proc, Prepr, Antibes, Fr, Jun 2-4 1975 p 121-127. Publ by North-Holland Publ Co, Amsterdam, 1975. Available in US and Can from Am Elsevier Publ Co, New York, NY

Publication Year: 1975

Language: ENGLISH

Journal Announcement: 7611

Abstract: A formal description is presented for the first **part** of a **code** generator, which performs the translation of an attributed program tree into a program in an intermediate language. The description consists of code **templates** and the specification of an intermediate language, and can be used as an input to a compiler-writing system. One code **template** describes the translation of each operator at any node within the program

tree, as a function of the local environment only. 11 refs.

Descriptors: \*COMPUTER PROGRAMMING LANGUAGES; COMPUTER OPERATING SYSTEMS

Classification Codes:

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/15 (Item 15 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00195735 E.I. Monthly No: EI71X161898

Title: Definitions and values.

Author: COMM, R. E. P.

Source: ASME, Performance Test Codes PTC 2 1971, 22 p

Publication Year: 1971

Language: ENGLISH

Journal Announcement: 71X1

Abstract: The purpose of this code is to provide the necessary information and data to comply with the mandatory requirement of PTC 1 that "all individual codes shall conform to the Code on Definitions and Values (PTC 2)". This code contains standards for terms, units, values of constants, symbols and technical nomenclature, which were applicable are to be component parts of all individual test codes. By necessity all the information contained in this document represents the state-of-the-art at the time of its preparation. In order that the Performance Test Codes may continue to be dynamic useful documents, any part of this code is automatically superseded by any or all of the following- & approval by ASME Council of new units, values of constants or fluid properties. Inclusion in the Performance Test Code series of equipment not covered by this code. Approval by the Standing Committee of an individual test code not conforming to this document. The exceptions described should be published in Mechanical Engineering as they occur, and this code should be amended as soon thereafter as practical.

Descriptors: \*TERMINOLOGY; BOILERS CODES; STANDARD; ENGINEERING--Units; STEAM TABLES AND CHARTS

Identifiers: ASME CODES

Classification Codes:

614 (Steam Power Plants); 641 (Heat & Thermodynamics); 902 (Engineering Graphics & Standards)

61 (PLANT & POWER ENGINEERING); 64 (HEAT & THERMODYNAMICS); 90 (GENERAL ENGINEERING)

13/5/16 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01790951 ORDER NO: AADAA-INQ55307

Flux associations and their relationship to the underlying heterogeneous surface characteristics

Author: Brown Mitic, Constance Maria

Degree: Ph.D.

Year: 1999

Corporate Source/Institution: McGill University (Canada) (0781)

Adviser: Peter Schuepp

Source: VOLUME 61/12-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 6517. 180 PAGES

Descriptors: PHYSICS, ATMOSPHERIC SCIENCE ; BIOLOGY, ECOLOGY ; ENVIRONMENTAL SCIENCES

Descriptor Codes: 0608; 0329; 0768

ISBN: 0-612-55307-8

This thesis consists of analysis of three different data sets:

(i) Aircraft-based eddy correlation data collected above irrigated and non-irrigated agricultural land in Southern California during the California Ozone Deposition Experiment (CODE) summer 1991;

(ii) micrometeorological tower data, collected over grape and cotton canopies as part of CODE ; (iii) aircraft-based eddy correlation flux data above two grid sites in the Canadian boreal forest during the Boreal Ecosystem-Atmosphere Study (BOREAS), spring and summer of 1994 and 1996.

Results from the CODE aircraft data document composition and size of the dominant structures, which transport heat and gases ( $H_2O$ ,  $CO_2$  and ozone) over water stressed and non-water stressed surfaces, and the relative frequency with which structures carrying only a single scalar, or given combinations of scalars, were encountered along the flight paths. Interpretation of results provides further evidence for the existence of a second (nonphysiological) sink for ozone. The relative preponderance of structures that carry moisture, carbon dioxide and ozone simultaneously, particularly in the gradient-up mode, reflects the importance of vegetation as co-located source/sink for these scalars. The detrending procedures described in this study may help to define a more effective separation between local and mesoscale events in biosphere-atmosphere interaction.

Results from the CODE tower data indicates a single vegetated ozone sink for the grape site, but a vegetated as well as a non-vegetated sink for the cotton site. For both sites, structures simultaneously transporting significant flux contributions of  $CO_2$ ,  $H_2O$ , heat and ozone dominate during unstable conditions. During stable conditions, unmixed single flux structures dominated over cotton but not over grape. The results of this study contribute empirical evidence about the relationship between ozone uptake and the physical and physiological state of vegetation, as well as the limitations placed on eddy scales in simulation models.

Results from the BOREAS aircraft data shows a decoupling between the surface and the atmosphere, where the patterns of vegetation, greenness and surface temperature may be quite dissimilar to those of the fluxes of sensible heat, latent heat and to a lesser degree  $CO_2$ . Reasons for this lie in the extraordinary boundary layer conditions, high vapour pressure deficit, moist soil and hot canopies, and the response of the vegetation to these conditions. Analysis of the coherent structure compositions to some extent permits the characterization of the different sources and sinks. Overall, this study shows the importance of understanding the various interacting components of soil, vegetation and atmosphere when attempting to design process-based models for predictions in 'micrometeorologically' complex ecosystems.

13/5/17 (Item 2 from file: 35)

DIALOG(R) File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01594074. ORDER NO: AADMM-18423

**BUILDING INSPECTION WITH AUTOMATED CODE COMPLIANCE CHECKING**

Author: NGUYEN, TANG-HUNG

Degree: M.SC.A.

Year: 1996

Corporate Source/Institution: CONCORDIA UNIVERSITY (CANADA) (0228)

Advisers: CLAUDE BEDARD; KINH HUY HA

Source: VOLUME 35/06 of MASTERS ABSTRACTS.

PAGE 1847. 149 PAGES

Descriptors: ENGINEERING, CIVIL ; ARCHITECTURE

Descriptor Codes: 0543; 0729

ISBN: 0-612-18423-4

The present research aims at developing an automated approach for the diagnostic of existing buildings during inspection. The proposed methodology is an intelligent system combining current computer technologies such as expert systems, databases, and **hypertext** techniques. The expert system represents and reasons with specialist knowledge to diagnose problems with code compliance checking whereas the database and **hypertext** techniques are efficient for handling cross references among

distinct building subsystems and disciplinary viewpoints in data management systems.

The development is characterized by two tasks: the establishment of a knowledge base consisting of building **code** requirements in **Part 3** of the National Building Code of Canada, and the incorporation of a data management module.

The research methodology has been implemented in a software prototype known as Health and Safety Expert System (HASES) The prototype system relies on knowledge and reasoning to interpret the requirements of **Part 3** of the National Building Code of Canada. HASES aims at facilitating the inspection of existing buildings by simplifying the data collection and compliance checking processes, generating reports, and providing access to texts and relevant case studies on the fly, as an inspector walks around a building. (Abstract shortened by UMI.)

13/5/18 (Item 3 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01464563 ORDER NO: AADAA-IC469122

**DIE ABTEIKIRCHE NONNBERG IN SALZBURG**

Original Title: THE ABBEY-CHURCH NONNBERG OF SALZBURG (AUSTRIA)

Author: LANGTHALER, JOHANN

Degree: DR.PHIL.

Year: 1991

Corporate Source/Institution: UNIVERSITAET SALZBURG (AUSTRIA) (5806)

Source: VOLUME 57/01-C OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 37. 478 PAGES

Descriptors: RELIGION, HISTORY OF ; ART HISTORY ; ARCHITECTURE

Descriptor Codes: 0320; 0377; 0729

Language: GERMAN

The exploration of the abbey-church of Nonnberg refers only to the architecture of the church. The content of the dissertation is divided into 8 main parts: Part I: A historical survey of the activities of the building with extracts from the existing **documents** . Part II: The Gothic church and its most important phases of origin. Part III: The outfit of the church. Part IV: The ground-plan of the church and its crypt. The vault of the church. Part VI: Summary; Part VII: Appendage; Part VIII: Illustration-part. Part I describes the history of the church with important dates from the foundation of the abbey (713) to the 20th century with references to the existing **documents** . Part II describes the several phases in which the church was built. Part III is a short description of the outfit of the church. Part IV The ground-plan of the church and its crypt is explored in detail. A new ground-plan of the **crypt** was made. **Part V** The different vaults which exist in the church are explored and dated. Part VI is a summary of the dissertation which includes personal thoughts and results about this subject. Part VII is the appendage which includes a lot of **documents** (contracts...) In Part VIII are 133 illustrations on the subject.

Results. A new ground-plan of the crypt was made and the original Romanesque measuring unit was determined. The Romanesque rests of the church which burned 1423 could be determined. All parts of the church were dated. The portal was explored and compared to others in the environment of Salzburg.

13/5/19 (Item 4 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01166971 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.

**THE JURIDICAL STATUS OF CATECHUMENS: A CANONICAL STUDY OF CHURCH DOCUMENTS SINCE VATICAN II, AND OF PREVIOUS DOCUMENTS OF AFRICAN CHURCHES**

Author: MUSIOL, JOZEF

Year: 1989  
Corporate Source/Institution: PONTIFICIA UNIVERSITAS GREGORIANA  
(VATICAN) (1049)  
Source: VOLUME 52/03-C OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 314. 476 PAGES  
Descriptors: RELIGION, GENERAL  
Descriptor Codes: 0318

The Second Vatican Council decided that the juridical status of catechumens should be clarified in the new code (cf. A.G. 14 c). The code, however, did not take a clear stand on this question. In canon 788 S 3, it stated: "the Episcopal conferences are responsible for establishing norms ... determining what should be done by catechumens and what should be their prerogatives". In this way, the task of clarification of the juridical status of catechumens was assigned to the Episcopal Conferences.

This task creates the need for deeper knowledge of the problems connected with the juridical status of catechumens. In fulfilling this, consideration should be given to the various elements of juridical status of catechumens already present in different Church documents. The conciliar and post-conciliar documents will be the main point of reference. However, the previous juridical experience of the mission catechumenates which proved so successful since the end of XIX century should also be recalled and taken into consideration.

This dissertation contributes to a better understanding of the juridical status of catechumens. It is an analytical study of the particular rights and duties of catechumens within the framework of catechumenate.

The work is divided into two parts, the first of which investigates the Council documents and conciliar debates, the Rite of Christian Initiation of Adults and the Code. The second part examines more than 50 documents of various African mission Churches which concern the rights and duties of catechumens prior to Council's acknowledgement of the catechumens' juridical status.

13/5/20 (Item 5 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01142445 ORDER NO: AADD--91053

**DECLARATIVE-CONFIGURABLE ESTIMATING SYSTEMS FOR THE CONSTRUCTION INDUSTRY**

Author: PANTOUVAKIS, JOHN-PARIS  
Degree: PH.D.  
Year: 1990  
Corporate Source/Institution: UNIVERSITY OF NOTTINGHAM (UNITED KINGDOM)  
(0616)  
Source: VOLUME 51/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 4502. 420 PAGES  
Descriptors: ENGINEERING, CIVIL; COMPUTER SCIENCE  
Descriptor Codes: 0543; 0984

Available from UMI in association with The British Library. Requires signed TDF.

The work presented in this thesis is about computer-aided estimating systems for the construction industry. A wide variety of such systems is now available, however, the diversity and complexity of individual practices has meant that many prospective users have been unable to find suitable software.

This thesis presents an innovative approach to the subject in which the development of an estimating system is based upon a set of software tools. These tools cater for the greater part of the code requirements of the system, thus, drastically reducing the development cost. In this context, certain modification capabilities are granted to the end-users (i.e. the estimators) (through the parsing of their requirements in a non-procedural (or declarative) manner), whereas more extensive modifications (or configurations) can be implemented prior to installation by professional programmers (due to the modular nature of the system and



the provision of detailed **documentation** and suitable software).

The approach employed by this thesis is characterized by the development of 'PRO.M.I.S.', a fully operational prototype declarative-configurable estimating system. The overall conclusion that can be drawn from this work is that this approach is valid for the particular context of construction estimating and, furthermore, it may lead to more functional, user-friendly and economical construction management computer systems in the future.

13/5/21 (Item 6 from file: 35)  
DIALOG(R) File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

835093 ORDER NO: AAD84-04926

**CHINESE COMMERCIAL LAW IN THE LATE CH'ING (1842-1911): JURISPRUDENCE AND THE DISPUTE RESOLUTION PROCESS IN TAIWAN**

Author: LIU, CHANG BIN

Degree: PH.D.

Year: 1983

Corporate Source/Institution: UNIVERSITY OF WASHINGTON (0250)

Source: VOLUME 44/11-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3472. 346 PAGES

Descriptors: LAW

Descriptor Codes: 0398

This dissertation is a study of Chinese commercial law and practice in the late Ch'ing era (1842 - 1911). Part I examines analogues of "commercial law" in Chinese and Western jurisprudence, the historical development of relevant Chinese legal concepts, and the institutional background. Special attention is paid to the administration of justice by local institutions and to the functioning of informal institutions, such as the guild, clan, and gentry.

For generations, Chinese commercial law has remained obscure to western analysis because of the preponderant penal nature of the traditional Chinese legal **codes**. Part II makes a detailed analysis of the main sources of commercial law including the Ch'ing code (Ta ch'ing lu li), clan and guild rules, and the customary law. Besides the Ch'ing code, the major types of materials used to analyze the Ch'ing private commercial law are the guild charters and the customs found in the Japanese compilation, Taiwan shiho (Private Law of Taiwan). Analysis focuses on provisions dealing with the following commercial transactions and problems: sales, redeemable sales (tien), loans and pawns, warranty, fair competition, and risk of loss. Special emphasis is placed on local customs and commercial practices in governing sales and redeemable sales.

Part III deals with the dispute resolution process in commercial matters. Using the extensive Tanshui-Hsinchu Archives (Tan-hsin tang an) as the major source, fundamental causes for legal problems and disputes arising out of agreements are discussed and statistical studies are made. The archives show us the following distinctive steps required in the dispute settlement process in Taiwan: petition; assignment of the case; magistrate's action; trial and fact finding; and judgment. At each step, the significant characteristics, legal **documents** and forms, and key personnel involved are described in detail. Statistics are gathered and used to support the argument.

Overall, this dissertation seeks to present a comprehensive picture of the Ch'ing commercial law in theory and practice.

13/5/22 (Item 1 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

1203233

**Social services delivery information system for in-house services.**

Book Title: 1976 March 7. Maine Department Of Human Services, Augusta. 36

P. Ntis: Shr-0001073; Hc (a03), Mf (a01). See Isa 77-3490/m, 3336/n.  
Author(s): Maine Department Of Human Services  
Publication Date: 1976  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 1200

This manual, intended for users of the in-house service delivery information system of the maine department of human services, is provided. The **document** includes a flow chart of in-house service delivery, sample forms and related computer printouts, and appendixes containing a dictionary listing sample, a **partial** listing of **code** tables, and additional statistical information.

Classification Codes and Description: 6.09 (Management Information Systems and Decision Support)  
Main Heading: Information Systems and Applications

13/5/23 (Item 2 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

1002050  
**A semantic analysis of abstracts around an experiment in mechanized indexing.**  
Book Title: Ph. D. Dissertation, Universite De Liege. 1972. 562 P. Ref.  
Edrs: Ed 100 149; Hc \$27.00, Mf \$0.90, Plus Postage.  
Author(s): Noel, Jacques  
Publication Date: 1972  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 1000

The first part of this dissertation is a metatheoretical discussion of the needs and means of semantic analysis. This discussion includes sections on metalanguage, deep and surface structure and structural semantics, and procedures for relating the english of abstracting to a classification concordance in the same language. The second part describes the experiment, in which a mechanized indexing system was developed and applied to 50 abstracts from a bibliography on **documentation**. In this system, each text word or symbol is replaced by a code, after which the machine performs step-by-step concatenations, rewriting two or more codes as a single code, until each abstract is rewritten as a single **code**. **Part** three is a discussion of problems of semantic representation in: 1) theoretical background-constituent-structure rules, lexical entries, and conjunction, discourse, and relative clauses; 2) expressions such as "a discussion of..." and "this paper discusses..."; 3) conjunction, relative changes, and presupposition; 4) asymmetric conjunction-proposes an analysis in terms of case theory; and 5) examples drawn from the corpus that present difficulties for current case theory (for example, "as machines learn..."). The appendices contain descriptors, sample abstracts, and other material used in this study. A 14-page bibliography concludes the work.

Classification Codes and Description: 4.04 (Abstracting, Reviewing)  
Main Heading: Information Recognition and Description

13/5/24 (Item 3 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0803178  
**Udc for mechanized information in viniti.**  
Book Title: In Molgaard-hansen, Rasmus, Ed.; Westring-nielsen, Margit, Ed.

Proceedings Of The Second Seminar On Udc And Mechanized Information Systems, Frankfurt, Germany, 1st-5th June 1970. 1971. Danmarks Tekniske Bibliotek, Copenhagen, Denmark. P. 131-132. 0 Ref. S  
Author(s): Popov, I V  
Corporate Source: Viniti, Moscow.  
Publication Date: 1970  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 0800

An automated information retrieval system for hydrometeorology has been developed, and its characteristics described. The system retrieves both **documents** and data. The retrieval is based on udc and a small specialized thesaurus of descriptors. **Document** indexing is performed to the maximum depth; on the average, one **document** has seven udc **codes**. **Partial** revision of udc 551.5 (meteorology. Climatology) is planned to improve retrieval. Other studies such as computer programming, microfilm displays, pattern recognition of information, and mechanized storage for **documents** are being conducted.

Classification Codes and Description: 4.07 (Classification, Indexing, and Thesauri)  
Main Heading: Information Recognition and Description

13/5/25 (Item 4 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0502684

**Inis: terminology and codes for countries and international organizations.**  
Book Title: Iaea-inis-5 (rev. 0). Director, Division Of Scientific And Technical Information, International Atomic Energy Agency, Karntnering 11, P.o. Box 590 A-1011 Vienna, Austria. 20 P. Mf \$0.65.  
Corporate Source: INTERNATIONAL ATOMIC ENERGY AGENCY; INTERNATIONAL NUCLEAR INFORMATION SYSTEM.  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 0500

Part i of this report lists, in english alphabetical order, the names of countries with a corresponding two-character alphabetic code, for use by national and regional information and **documentation** centers preparing input for inis. Part ii lists, in english alphabetical order, the names of organizations (usually international organizations) with a corresponding two-character alphabetic **code**. **Part . Iii** list, in english alphabetical the codes for countries and organizations.

Classification Codes and Description: 4.07 (Classification, Indexing, and Thesauri)  
Main Heading: Information Recognition and Description

13/5/26 (Item 5 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0100349

**Systems of data and literature retrieval in spectroscopy.**  
Author(s): Kaiser, H  
Corporate Source: Institut Fuer Spektrochemie Und Angewandte Spektroskopie, Dortmund, Germany  
Hilger Journal vol. 9, no. 4, pages 64-73  
Publication Date: November 1965  
Language: English

Document Type: Journal Article  
Record Type: Abstract  
Journal Announcement: 0100

The dms ( **documentation** of molecular spectroscopy) system developed by the german institute for basic and applied spectroscopy is described. It is based on the use of inverted file, concept coordination, optical coincidence cards in conjunction with a two- **part code** by which all important concepts in this special discipline are expressed in terms of a relatively small vocabulary (152 "words") represented by three-digit numbers. An outline of the code is included. Computer techniques are used to produce both junior indexes to each issue of a current literature list, as well as the dms general index, from the punched optical coincidence cards.

Classification Codes and Description: 6.03 (Abstracting, Indexing, and Review Services)

Main Heading: Information Systems and Applications

13/5/27 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

6195172 INSPEC Abstract Number: B1999-04-6135C-167, C1999-04-6130D-016

**Title:** Document **image compression using straight line extraction and block context model**

**Author(s):** Hwayong Joung; Wong, E.K.; Yu Chen; Kim, S.P.

**Author Affiliation:** Dept. of Comput. Sci., Polytech. Univ., Brooklyn, NY, USA

**Conference Title:** Proceedings 1998 International Conference on Image Processing. ICIP98 (Cat. No.98CB36269) Part vol.1 p.530-4 vol.1

**Publisher:** IEEE Comput. Soc, Los Alamitos, CA, USA

**Publication Date:** 1998 **Country of Publication:** USA 3 vol. (lxxxi+962+984+1013) pp.

**ISBN:** 0 8186 8821 1 **Material Identity Number:** XX-1998-01745

**U.S. Copyright Clearance Center Code:** 0 8186 8821 1/98/\$10.00

**Conference Title:** Proceedings of IPCIP'98 International Conference on Image Processing

**Conference Sponsor:** IEEE Signal Process. Soc

**Conference Date:** 4-7 Oct. 1998 **Conference Location:** Chicago, IL, USA

**Language:** English **Document Type:** Conference Paper (PA)

**Treatment:** Theoretical (T)

**Abstract:** We present a new lossy technique for **document image compression** by using straight line extraction and a block context model. Straight line segments are extracted from a binary **document image** and subtracted from the original image. Their endpoint coordinates and width can then be efficiently **coded**. The remaining **part** of the image, which mainly contains text and other symbols, is coded using a high-order block context model (HOBCEM) based on vector quantization (VQ). The proposed method is particularly effective for **document images** containing a large number of straight line segments, such as engineering or architectural drawings. It achieves much higher compression than conventional lossless techniques, such as the JBIG and CCITT G3 and G4 standards, with little loss of visual quality. In the experiments we carried out, a group of engineering drawings digitized at 200 dpi, compression ratios ranging from 30 to 70 were obtained. (6 Refs)

**Subfile:** B C

**Descriptors:** **document image processing**; edge detection; feature extraction; image coding; vector quantisation

**Identifiers:** **document image compression**; straight line extraction; block context model; lossy technique; binary **document image**; endpoint coordinates; width; high-order block context model; HOBCEM; vector quantization; VQ; engineering drawings; architectural drawings; compression; visual quality; compression ratios

**Class Codes:** B6135C (Image and video coding); B6135E (Image recognition); C6130D (Document processing techniques); C5260B (Computer vision and image

processing techniques); C1260S (Signal processing theory); C1250M (Image recognition)

Copyright 1999, IEE

13/5/28 (Item 2 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

5946412 INSPEC Abstract Number: C9807-6140D-051

**Title: Proceedings of the 1998 International Conference on Computer Languages (Cat. No.98CB36225)**

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1998 Country of Publication: USA x+282 pp.

ISBN: 0 8186 8454 2 Material Identity Number: XX98-01333

U.S. Copyright Clearance Center Code: 98/\$10.00

Conference Title: Proceedings of the 1998 International Conference on Computer Languages (Cat. No.98CB36225)

Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Comput. Languages; ACM SIGPLAN

Conference Date: 14-16 May 1998 Conference Location: Chicago, IL, USA

Language: English Document Type: Conference Proceedings (CP)

Abstract: The following topics were dealt with: computer languages; security and dynamic class loading in Java; transactions for Java; breaking abstractions and unstructuring data structures; reflexivity for CORBA interfacing; reactive programming in Standard ML; Triveni process-algebraic API; distributed computation; microarchitecture simulators; microprocessor specification in Hawk; **template** and multiple inheritance approach to attribute grammars; functional and object-oriented programming methodologies; modular compilers; automatic **template**-based run-time specialization; self-applicable on-line partial evaluation; parallelization via context preservation; syntactic control of interference; probabilistic concurrent constraint programming; destructive array update optimization; deterministic logic program evaluation; dependence analysis for recursive data; optimal **code** motion; **partial** redundancy elimination; profile-driven dynamic recompilation; formal callability; aggregate array computation; and data flow analysis.

Subfile: C

Descriptors: data flow analysis; data structures; high level languages; program compilers; programming

Identifiers: computer languages; Java security; Java dynamic class loading; Java transactions; abstraction breaking; unstructured data structures; CORBA interfacing; Standard ML reactive programming; Triveni process-algebraic API; distributed computation; microarchitecture simulators; microprocessor specification; attribute grammars; functional programming; object-oriented programming; modular compilers; automatic **template**-based run-time specialization; self-applicable on-line partial evaluation; parallelization; context preservation; syntactic interference control; probabilistic concurrent constraint programming; destructive array update optimization; deterministic logic program evaluation; dependence analysis; recursive data; optimal **code** motion; **partial** redundancy elimination; profile-driven dynamic recompilation; formal callability; aggregate array computation; data flow analysis

Class Codes: C6140D (High level languages); C6120 (File organisation); C6110 (Systems analysis and programming); C6150 (Systems software)

Copyright 1998, IEE

13/5/29 (Item 3 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

5704685 INSPEC Abstract Number: C9711-5260B-142

**Title: Handwritten ZIP code recognition**

Author(s): Dzuba, G.; Filatov, A.; Volgunin, A.

Author Affiliation: Parascript, Boulder, CO, USA

Conference Title: Proceedings of the Fourth International Conference on

Document Analysis and Recognition (Cat. No.97TB100138) Part vol.2 p.  
766-70 vol.2

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1997 Country of Publication: USA 2 vol. xxiv+1119

pp.

ISBN: 0 8186 7898 4 Material Identity Number: XX97-02265

U.S. Copyright Clearance Center Code: 0 8186 7898 4/97/\$10.00

Conference Title: Proceedings of the Fourth International Conference on Document Analysis and Recognition

Conference Sponsor: Int. Assoc. Pattern Recognition (IAPR), TC 10 & 11; Int. Graphonomics Soc. (IGS); German Assoc. Comput. Sci. (GI); German Assoc. Inf. Technol. (ITG)

Conference Date: 18-20 Aug. 1997 Conference Location: Ulm, Germany

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P); Experimental (X)

Abstract: The encoding of delivery point code (DPC) for a handwritten address is one of the most complex problems of the US mail delivery automation. This paper describes a real-time system intended to recognize the 5-digit ZIP code part of DPC. To increase the system performance the results of ZIP code recognition are cross-validated with those of city and state name recognition. The main principles of the handwritten word recognizer which provide the core of the system are explained. The system throughput is 40,000 address blocks per hour. Experimental results on live mail pieces are presented. The ZIP code recognition rate is 73% with 1% error rate. (4 Refs)

Subfile: C

Descriptors: document image processing; handwriting recognition; mailing systems; optical character recognition; performance evaluation; postal services; real-time systems

Identifiers: handwritten ZIP code recognition; delivery point code; handwritten address; US mail delivery automation; real-time system; system performance; state name recognition; city name recognition; handwritten word recognizer; system throughput; mail pieces; error rate

Class Codes: C5260B (Computer vision and image processing techniques); C1250B (Character recognition); C6130D (Document processing techniques); C7185 (Administration of other service industries); C7104 (Office automation)

Copyright 1997, IEE

13/5/30 (Item 4 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

4950978 INSPEC Abstract Number: C9506-5260B-269

Title: Recognition of handprinted digits using optimal bounded error matching

Author(s): Breul, T.M.

Author Affiliation: IDIAP, Martigny, Switzerland

p.493-6

Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1993 Country of Publication: USA xx+963 pp.

ISBN: 0 8186 4960 7

U.S. Copyright Clearance Center Code: 0 8186 4960 7/93/\$3.00

Conference Title: Proceedings of 2nd International Conference on Document Analysis and Recognition (ICDAR '93)

Conference Sponsor: IAPR TC-11 & TC-10; IEEE Comput. Soc. & IGS

Conference Date: 20-22 Oct. 1993 Conference Location: Tsukuba Science City, Japan

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A system for recognizing handprinted digits using optimal bounded error matching is described. Bounded error matching is already in common use in general-purpose 2D and 3D visual object recognition and can cope with clutter, occlusions, and noise, important issues also in OCR. The results presented demonstrate that the same techniques achieve high recognition rates (up to 99.2%) on a real-world handprinted digit

recognition task (the NIST database of hand-printed census forms and the CEDAR database of digits extracted from US mail ZIP codes). As part of the system, a post-processing step for k-nearest neighbor classifiers based on decision trees is described that can be used (in place of the usual heuristic methods) for setting thresholds and that improves recognition rates significantly. (15 Refs)

Subfile: C

Descriptors: character recognition; document handling; handwriting recognition; optical character recognition; trees (mathematics); visual databases

Identifiers: bounded error matching; digit recognition; handprinted digits; optimal bounded error matching; 3D visual object recognition; OCR; recognition rates; real-world handprinted digit recognition task; NIST database; hand-printed census forms; CEDAR database; US mail ZIP codes; post-processing step; k-nearest neighbor classifiers; decision trees; heuristic methods

Class Codes: C5260B (Computer vision and image processing techniques); C6130D (Document processing techniques); C6160S (Spatial and pictorial databases); C1160 (Combinatorial mathematics)

Copyright 1995, IEE

13/5/31 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

4946225 INSPEC Abstract Number: C9506-6130S-041

**Title:** Virus detection using a generalised virus description language

**Author(s):** Coates, G.; Leigh, D.

**Author Affiliation:** Sch. of Comput., Staffordshire Univ., Beaconside, UK p.83-96

**Publisher:** Virus Bulletin, Oxford, UK.

**Publication Date:** 1994 **Country of Publication:** UK xxii+194 pp.

**Conference Title:** Proceedings of Virus Bulletin International Conference

**Conference Date:** 8-9 Sept. 1994 **Conference Location:** Jersey, UK

**Language:** English **Document Type:** Conference Paper (PA)

**Treatment:** Practical (P)

**Abstract:** This paper discusses the requirements and implementation of a generalised virus detector. It is irrelevant to the detector whether the virus code forms part of an existing file or takes up the whole of such a file. To detect such viruses so that they may be eradicated is an important aspect of computer systems maintenance. Where multiple infection has taken place, this may be an extensive and expensive activity. The approach to the production of much virus-detection software is bottom-up, relying on the hand-crafting of virus-recognition components which are then embedded into an enabling framework. The alternative approach, which is described here (top-down implementation), aims to develop a framework in which virus detection elements may operate. This provides a stable environment not only for implementation itself, but also for the continuing development of specialised components. The virus definition patterns are described using a simple, mainly context-free language, where the description is used directly to build an intermediate structure used in the detection operations. The parsing which leads to this intermediate structure is described, including the checking operations to establish validity of the virus description. The advantages and mechanisms of a flexible detection approach are further discussed. The use of the intermediate structure as a template for pattern matching is illustrated. The alternative approaches for multiple files are evaluated. Examples of the results achieved in real environments are given. (15 Refs)

Subfile: C

Descriptors: computer viruses; context-free languages; program diagnostics; specification languages

Identifiers: virus detection; generalised virus description language; stand-alone virus files; worms; computer systems maintenance; multiple infection; virus-detection software; virus definition patterns; context-free language; parsing; pattern matching; multiple viruses

Class Codes: C6130S (Data security); C6150G (Diagnostic, testing,

debugging and evaluating systems); C4210L (Formal languages and computational linguistics)

Copyright 1995, IEE

13/5/32 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03668006 INSPEC Abstract Number: C90046755

**Title: A programming style**

Author(s): Haydon, G.B.

Author Affiliation: WISC Technol. Inc., La Honda, CA, USA

Conference Title: 1989 Rochester Forth Conference. Industrial Automation p.72-3

Publisher: Inst. Appl. Forth Res, Rochester, NY, USA

Publication Date: 1989 Country of Publication: USA vii+143 pp.

ISBN: 0 914593 09 9

Conference Date: 20-24 June 1989 Conference Location: Rochester, NY, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The key to good programming is clear thinking. Source code should be written in good narrative English. It should start with the program specifications. Programming is then the process of refining the thinking which enlarges the specifications into a **template** for the program's structure before adding the **code** implementation. As **part** of the narrative, test vectors and comments on the algorithms should be included with each structure. Let the computer find the code. Its ego will not suffer. There are as many different styles of computer programming as there are programmers' and then some. In most cases, no style is even considered. The goal is to get the job done and move on. (0 Refs)

Subfile: C

Descriptors: FORTH; programming

Identifiers: source code; Forth; program structure **template** ; programming style; clear thinking; narrative English; program specifications; code implementation; test vectors; comments; algorithms

Class Codes: C6110 (Systems analysis and programming)

13/5/33 (Item 7 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03593929 INSPEC Abstract Number: C90027138

**Title: Rewritable optical disk subsystem 112 series**

Author(s): Kushizaki, O.; Shigematsu, K.

Author Affiliation: Hitachi Ltd., Odawara, Japan

Journal: Hitachi Review vol.38, no.5 p.253-6

Publication Date: Oct. 1989 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Product Review (R)

Abstract: Optical disks for computer file memory have entered a new generation with newly developed rewritable technology. The write once optical disk has been popularly used for **document** files, image files, and as a **part** of **coded** data files because of its compact, large storage capacity and easy handling with removable media. The newly developed 5.25-inch rewritable optical disk subsystems, the OD112 and OL112 Series, incorporate erase and rewritable functions with magneto optical technology. The main applications for rewritable optical disk subsystems are as online data files, back-up files and image files. (2 Refs)

Subfile: C

Descriptors: optical disc storage

Identifiers: Hitachi; optical disk subsystem; 112 series; rewritable optical disk; OD112; OL112; 5.25 inch

Class Codes: C5320K (Optical storage)



Numerical Indexing: size 1.33E-01 m

13/5/34 (Item 8 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03514040 INSPEC Abstract Number: C90002744

**Title: A compiler and workbench for precise specification development**

Author(s): Warren, J.H.

Conference Title: Second International Conference on Software Engineering for Real Time Systems (Conf. Publ. no.309) p.55-9

Publisher: IEE, London, UK

Publication Date: 1989 Country of Publication: UK xii+287 pp.

Conference Date: 18-20 Sept. 1989 Conference Location: Cirencester, UK

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: An overview is given of a system for specification development as well as the method and the tools that support it. The objectives of the system are to produce specifications which are: clear, consistent, complete and totally unambiguous; support mathematical reasoning; and lead to the production of relevant **documentation** and the automatic generation of application code. The system addresses requirements expression. It comprises a language and a set of tools for manipulating statements in the language. The system toolset is rule-based with a mathematical foundation in predicate calculus and relational algebra. It is susceptible to mathematical reasoning and it is applicable to a wide range of problem areas. Tools available include a (syntax directed) editor, compiler, animator, a preliminary symbolic manipulator and a **partial code** generator. Additional tools under development include a configuration manager, an extended code generator and some preliminary mathematical reasoning tools. (3 Refs)

Subfile: C

Descriptors: application generators; expert systems; formal specification ; program compilers; software tools; specification languages

Identifiers: workbench; precise specification development; specification development; unambiguous; mathematical reasoning; relevant **documentation** ; application code; requirements expression; system toolset; rule-based; mathematical foundation; predicate calculus; relational algebra; syntax directed; editor; compiler; animator; preliminary symbolic manipulator; **partial code** generator

Class Codes: C6115 (Programming support); C6110B (Software engineering techniques); C6170 (Expert systems); C6140D (High level languages); C6150C (Compilers, interpreters and other processors)

13/5/35 (Item 9 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02354796 INSPEC Abstract Number: C85002643

**Title: Software engineering for user interfaces**

Author(s): Draper, S.W.; Norman, D.A.

Author Affiliation: Inst. for Cognitive Sci., Univ. of California at San Diego, La Jolla, CA, USA

Conference Title: Proceedings of the 7th International Conference on Software Engineering (cat. no. 84CH2011-5) p.214-20

Publisher: IEEE, New York, NY, USA

Publication Date: 1984 Country of Publication: USA xiv+545 pp.

ISBN: 0 8186 0528 6

U.S. Copyright Clearance Center Code: 0270-5257/84/0000-0214\$01.00

Conference Sponsor: IEEE; ACM; NBS

Conference Date: 26-29 March 1984 Conference Location: Orlando, FL, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The authors consider the extension of software engineering to

deal with the issues raised by the design of human-machine interfaces. He discusses the goals in optimizing an interface; the state of interface design; the effect of the interface on **code** ; **documentation** as part of the interface; and interface debugging and testing. (21 Refs)

Subfile: C

Descriptors: human factors; interactive systems; software engineering

Identifiers: human factors; user interfaces; software engineering;  
human-machine interfaces; **documentation** ; interface debugging; testing

Class Codes: C6110 (Systems analysis and programming)

13/5/36 (Item 10 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02286981 INSPEC Abstract Number: C84034753

**Title: Using comments to aid program maintenance**

Author(s): Thomas, R.A.

Journal: BYTE vol.9, no.5 p.415-22

Publication Date: May 1984 Country of Publication: USA

CODEN: BYTEDJ ISSN: 0360-5280

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Complex software can be maintained more easily by the judicious use of remarks embedded within program **code** . Comments are **part** of the internal **documentation** written for the programmer, as differentiated from the end-user's manual. Even so they rarely contain all the information necessary for maintaining a program. The need for a systematisation of comments is stressed. COBOL is not a completely successful attempt at making a language self- **documenting** . (12 Refs)

Subfile: C

Descriptors: programming

Identifiers: remarks; internal **documentation** ; systematisation; comments  
; COBOL; self- **documenting**

Class Codes: C6110 (Systems analysis and programming)

13/5/37 (Item 11 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02047152 INSPEC Abstract Number: C83021845

**Title: Programs as data for their help systems**

Author(s): Rich, E.A.

Author Affiliation: Univ. of Texas, Austin, TX, USA

Conference Title: AFIPS Conference Proceedings. Vol.51. 1982 National Computer Conference p.481-5

Editor(s): Morgan, H.L.

Publisher: AFIPS Press, Arlington, VA, USA

Publication Date: 1982 Country of Publication: USA xi+843 pp.

Conference Date: 7-10 June 1982 Conference Location: Houston, TX, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The goal of this research is to develop ways of representing the knowledge available to a help system in such a way that the system can actually reason with the knowledge rather than being restricted to simply retrieving and presenting stored answers to a restricted and anticipated class of questions. One kind of information that is useful to such an intelligent help system is knowledge of how the underlying system operates. This knowledge is contained in the code for the system. By exploiting system **code** as **part** of the help database, many problems of inconsistency between programs and their **documentation** can be avoided. In initial investigations of this problem, the author represents the system code as a set of productions that are easier to manipulate than is code in most standard languages. As she develops techniques for answering questions by reasoning with knowledge about the system, she becomes increasingly able to answer the growing variety of questions that will occur as the language

interface to a help system becomes more flexible. (2 Refs)

Subfile: C

Descriptors: database management systems; management information systems

Identifiers: DBMS; MIS; help systems; knowledge; system code; help database

Class Codes: C6160 (Database management systems (DBMS)); C7100 (Business and administration)

**13/5/38 (Item 1 from file: 233)**

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2003, EBSCO Pub. All rts. reserv.

00039588. 8236205

**Mapping machine language code , resource: part II**

Berger, T.R.

Compute! , Sep 1982 , v4 n9 p175-183, 7 pages

ISSN: 0194-357X

Languages: English

Document Type: Article

Program Listing in BASIC

Geographic Location: United States

Presents a series of OSI BASIC programs which can be used to help the user produce annotated disassemblies of machine language programs. Includes the following tables: keyword action addresses, memory table, Zpage table and JMP table.

Descriptors: OSI; \*Machine Language; \* Documentation

**13/5/39 (Item 2 from file: 233)**

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2003, EBSCO Pub. All rts. reserv.

00038180. 8225205

**Mapping machine language code : resource part I**

Berger, T.R.

Compute! , Jul 1982 , v4 n7 p175-182, 8 pages

ISSN: 0194-357X

Languages: English

Document Type: Article

Program Listing in BASIC and Assembly Language

Geographic Location: United States

Describes a group of programs that can be used to facilitate the regeneration of fully **documented** assembler source listings starting from machine language programs. Written for OSI computers but can be modified for other 6502 computers.

Descriptors: **Documentation** ; \*OSI; \*Machine Language; \*Disassembler

**13/5/40 (Item 1 from file: 94)**

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03518375. JICST ACCESSION NUMBER: 98A0294673 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); UNE HIROYUKI (1); SUIZU HISAO (2); (2)

Babuhitachinishisofutowea

Hiroshima Denki Daigaku, Hiroshima Jidosha Kogyo Tanki Daigaku Kenkyu

Hokoku(Memoirs of the Hiroshima-Denki Institute of Technology and the

Hiroshima Junior College of Automotive Engineering), 1997, VOL.30,

PAGE.69-74, FIG.7, REF.6

JOURNAL NUMBER: Z0846AAR ISSN NO: 0286-0562

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02-759 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multimedia information **partial encipherment** system enables free selection of confidential information on the screen from a text containing **document**, charts, and so on and enciphering so that only those in possession of the deciphering key can understand the confidential information. Moreover, data of items or optional portions of each item can be enciphered when the data is entered by the terminal unit. Thus information is stored in the host computer in a partially enciphered state. Using this newsystem reduces the possibility of hackers and host operators gaining access to confidential information. (author abst.)

DESCRIPTORS: cryptogram; data protection; security system; access control; **document**; image; database; multi-media; computer security; public key cryptography; cryptography key

BROADER DESCRIPTORS: protection; system; control; resource( **document** ); information media; security; guarantee

CLASSIFICATION CODE(S): .JD01020V; ND02030R.

13/5/41 (Item 2 from file: 94)

DIALOG(R)File .94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03419287 JICST ACCESSION NUMBER: 97A0819672 FILE SEGMENT: JICST-E  
**Visual Computing. The Improvement of the Image Quality of Fractal Image Compression Method.**

TSUBOI TOMO (1); NAKAMURA KAZUAKI (1); TSUNEDA MASATOSHI (1); YAMAMOTO SHINJI (1); ISHIKAWA ATSUSHI (2); ITO TETSUYA (2)

(1) Toyohashi Univ. of Technol.; (2) Minoruta

Gazo Denshi Gakkaishi(Journal of the Institute of Image Electronics Engineers of Japan), 1997, VOL.26,NO.4, PAGE.397-405, FIG.11, TBL.1, REF.10

JOURNAL NUMBER: S0815AAG ISSN NO: 0285-9831

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3

LANGUAGE: Japanese

COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: In this paper, we proposed two methods of fractal image compression to improve the quality of the decompressed image. First we proposed a fractal image compression method using the mathematical morphology. We divided an original image into a smooth part and an edge part by using the mathematical morphology. After that, the smooth **part** was **encoded** by the fractal block coding. The other side, the edge part was calculated run length of gray scale and encoded by the Huffman coding. Next, we proposed a fractal image compression method using approximate errors. We calculated error image between the range block and its fractal approximation. After that, the error image was calculated run length of gray scale and encoded by the Huffman coding. When test images were compressed by these two methods, restored images were maintained of high quality. And they achieved good result of subjective estimation in comparison with the conventional method. (author abst.)

DESCRIPTORS: fractal; coding(signal); image compression; image reproduction; image quality; edge detection; **block code**; Huffman code; error(measure); image; **document** image

BROADER DESCRIPTORS: modification; signal processing; treatment; image processing; information processing; regeneration; image characteristic; characteristic; detection; code

CLASSIFICATION CODE(S): JE04010I

13/5/42 (Item 3 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03124130 JICST ACCESSION NUMBER: 96A0838216 FILE SEGMENT: JICST-E  
**Handling cases of MF bar codes . Part 3. - New and easy bar code**

utilization. Possibility of easy barcode preparation by anyone with EUB software.

HIRAMOTO JUN'YA (1)

(1) Ainikkusu

Materialu Furo(Material Flow), 1996, VOL.37,NO.9, PAGE.18-22, FIG.4

JOURNAL NUMBER: G0534ACS ISSN NO: 1342-4599

UNIVERSAL DECIMAL CLASSIFICATION: 681.327.2

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: End user Barcoding (EUB)" which makes the construction of bar code system simple for anyone is outlined. AINIX Co., Ltd. which is a barcode system development company, has developed barcode generating software "BarStar" to be excuted on WINDOWS. Initiate the BarStar with word processor software and generate a barcode. Then it can be pasted to a **document** made by the word processor. EUB can be easily constructed by this operation.

DESCRIPTORS: bar code; word processor; menu system; program package

BROADER DESCRIPTORS: special purpose computer; computer; hardware; method; computer program; software

CLASSIFICATION CODE(S): JC04050U

13/5/43 (Item 4 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03124129 JICST ACCESSION NUMBER: 96A0838215 FILE SEGMENT: JICST-E

**Handling cases of MF bar codes . Part 1 - Reasonable utilization cases observed in upgrading bases. System up by barcodes. - Vital point of good command of them.**

Materialu Furo(Material Flow), 1996, VOL.37,NO.9, PAGE.10-14, FIG.8

JOURNAL NUMBER: G0534ACS ISSN NO: 1342-4599

UNIVERSAL DECIMAL CLASSIFICATION: 681.327.2 658.86/.87

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: Four examples of the advanced use of bar-code for picking, sorting and inspecting products are introduced. 1) processed food wholesaler where barcode is applied to product inspection and automatic sorting after picking, 2) a store for daily used clothing where sorting and storage delivery by case are fully automated, 3) a bed/bedding manufacturing and selling business making the best of four types of barcode : NW-7, ITF, JAN, and CODE39, 4) returned magazine treatment at a book wholesaler which makes the best of barcode for an enormous database.

DESCRIPTORS: bar code; sorting(handling); inspection; physical distribution ; printing and publishing industry; distribution center; food industry; supermarket; publications

BROADER DESCRIPTORS: cargo handling; distribution(marketing); manufacturing industry; industry; retail store; resource( **document** )

CLASSIFICATION CODE(S): JC04050U; KA080000

13/5/44 (Item 5 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

02089683 JICST ACCESSION NUMBER: 94A0766210 FILE SEGMENT: JICST-E

**Development of BERMUDA: A Radiation Transport Code System. Part III. A One-dimensional Adjoint Neutron Transport Code.**

TANAKA S (1); NAKASHIMA H (1); SUZUKI T (2); HASEGAWA A (3)

(1) Japan Atomic Energy Research Inst., Ibaraki-ken; (2) Nuclear Energy Data Center; (3) Nuclear Power Engineering Corp.

Nippon Genshiryoku Kenkyujo JAERI,Data,Code, 1994, PAGE.27P, FIG.1, TBL.1,

REF.3

JOURNAL NUMBER: L2147AAJ

REPORT NUMBER: JAERI-DATA-CODE-94-2

UNIVERSAL DECIMAL CLASSIFICATION: 62-758.35+621.039.538

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: A radiation transport code system BERMUDA has been developed for one-, two- and three-dimensional geometry. Purpose of the development is to establish a basis of an accurate shielding calculation method for general use. The time-independent transport equation is numerically solved using a direct spatial integration method in a multigroup model, to obtain spatial, angular and energy distribution of neutron, gamma rays or adjoint neutron flux. In 1992, four neutron transport codes were reported in JAERI 1327 as Part I. In 1993, four gamma rays transport codes were reported in JAERI-M 93-143 as Part II. In the present report as Part III, reported is the development of an adjoint neutron transport code for one-dimensional spherical geometry. Adjoint neutron flux is used in a sensitivity analysis or in a perturbation calculation. As described in Part I, use of the spherical harmonics expansion is avoided in representing anisotropy of both angular flux and scattering cross section. A group-angle transfer matrix is obtained by integrating double-differential cross sections numerically, taking energy-angle correlation into account. A first collision source method is utilized for a case of point source. Angular flux distribution is obtained by integrating the transport equation over a line segment along each angular discrete ordinate toward each spatial mesh point. A fine energy grid method is used, with a rebalancing scheme concerning the number of gain and loss of particles over each spatial region and also in each energy grid. The 'energy grid' means a 'subgroup' having equal lethargy width to each other in an energy group. As to group constants, the same library, J439B.BERM125X.DATA, is used commonly to the regular(forward) neutron transport codes as in Part I. (abridged author abst.)

DESCRIPTORS: radiation shielding; computer program; neutron flux; neutron transport; radiation source; three dimension; manual

BROADER DESCRIPTORS: shielding; software; radiation flux; flux; transport phenomenon; phenomenon; dimension; guide book; publications; resource(document)

CLASSIFICATION CODE(S): MB04000R

13/5/45 (Item 6 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01776693 JICST ACCESSION NUMBER: 93A0668427 FILE SEGMENT: JICST-E

Development of BERMUDA: A Radiation Transport Code System. Part II.

Gamma Rays Transport Codes.

SUZUKI T (1); HASEGAWA A (1); TANAKA S (1); NAKASHIMA H (1)

(1) Japan Atomic Energy Research Inst., Ibaraki-ken

Nippon Genshiryoku Kenkyujo JAERI,M Repoto, 1993, PAGE.89P, REF.12

JOURNAL NUMBER: G0711AAF

REPORT NUMBER: JAERI-M-93-143

UNIVERSAL DECIMAL CLASSIFICATION: 62-758.35+621.039.538

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Review article

MEDIA TYPE: Printed Publication

ABSTRACT: A radiation transport code system BERMUDA has been developed for one-, two- and three-dimensional geometries. Purpose of the development is to establish a basis of an accurate shielding calculation method for general use. The time-independent transport equation is numerically solved using a direct integration method in a multigroup model, to obtain spatial, angular and energy distributions of neutron, gamma rays or adjoint neutron flux. In 1992, the neutron transport codes were

reported in JAERI 1327 as Part I. In the present report as Part II, development of gamma rays transport codes is reported. As described in Part I, the spherical harmonics expansion is not used in representing anisotropy of both angular flux and scattering cross sections. Group-angle transfer matrix is calculated by numerically integrating the Klein-Nishina formula for Compton scattering, taking energy-angle correlation into account. Pair production and annihilation of electrons are also contained in the matrix. A first collision source method is use for a case of point source. Angular flux distribution is obtained by integrating the transport equation over the line segment along each angular discrete ordinate at each spatial mesh point. A fine energy grid(subgroup having equal energy width) method is used, with a rebalancing scheme concerning the number of gain and loss of photons over each coarse mesh region and also in each energy grid. (abridged author abst.)

DESCRIPTORS: transport phenomenon; computer program; photon; gamma-ray; manual; benchmark(computer); transportation; Compton scattering; electron pair creation; angular distribution

BROADER DESCRIPTORS: phenomenon; software; gauge boson; elementary particle; electromagnetic wave; wave motion; radioactive ray; guide book; publications; resource( document ); elastic scattering; scattering; electromagnetic interaction; interaction; pair production; particle production; distribution

CLASSIFICATION CODE(S): MB04000R

13/5/46 (Item 7 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01306982 JICST ACCESSION NUMBER: 91A0423934 FILE SEGMENT: JICST-E  
Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

OKANO HIROKAZU (1); KOMOTO MAKOTO (1)

(1) Hiroshimabunkyojodai

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1991, VOL.1991,NO.Spring Pt 6, PAGE.6.261, FIG.1, REF.2

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80 621.391.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

DESCRIPTORS: word processing; cryptogram; coding(signal); reliability(property); error correction

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; modification; signal processing; performance; error control; control

CLASSIFICATION CODE(S): JE06000L; ND02020G

13/5/47 (Item 8 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01147839 JICST ACCESSION NUMBER: 90A0921276 FILE SEGMENT: JICST-E  
**Natural language processing system on ships. (2nd Report. Generation of semantic structure from coded order).**

KIKUCHI JUN (1); SAKAMOTO KEN'YA (1); KATAGI TAKESHI (1)

(1) Kobe Univ. of Mercantile Marine

Kobe Shosen Daigaku Kiyo. 2. Shosen, Rikogakuhen(Review of Kobe University of Mercantile Marine. Part 2. Maritime Studies and Science and Engineering), 1990, NO.38, PAGE.109-116, FIG.8, REF.10

JOURNAL NUMBER: F0165ABK ISSN NO: 0450-609X

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80

LANGUAGE: Japanese                      COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

ABSTRACT: In the previous paper, it has been reported an acquisition of conversation data on the training ship Fukae Maru, and shown that main part of conversation on ships is highly formalized order and answer. It is reasonable to call that highly formalized **part** " **coded** order", because the ordres which belong to this part are highly simplified and have unambiguous meaning, comparable to computer language. This unambiguity of coded orders increases reliability of communication between crew, and also renders less difficult in natural language processing of conversation on ships. This paper shows an algorithm for discrimination coded orders from other conversation, and for generation of semantic structure from coded order. It is possible to implement the discrimination algorithm by simple pattern matching. Frame representation is applied as semantic structure which is implemented in object oriented environment on Symbolics LISP machine "Flavor". It should be refined frame structure of coded order, and investigated how to invoke those semantic representation for analysis on ordinary conversation data. (author abst.)

DESCRIPTORS: automatic language processing; natural language; data analysis ; ship; coding(signal); semantics; pattern classification; syntactic analysis; algorithm; feature extraction; LISP; language; dictionary

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; analysis; modification; signal processing; linguistics; cultural science; science; classification; analysis(separation); extraction; separation; high level language; programming language; formal language; list processing language; application oriented language; book; publications; resource( **document** )

CLASSIFICATION CODE(S): JE06000L

13/5/48                      (Item 9 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

00297805      JICST ACCESSION NUMBER: 86A0453759      FILE SEGMENT: JICST-E

**User's manual for SPLPLOT-2: A computer code for data plotting and editing in conversational mode.**

MURAMATSU KEN (1); MATSUMOTO KIYOSHI (1); KOHSAKA ATSUO (1); MANIWA MASAKI (2)

(1) Japan Atomic Energy Res. Inst., Tokai Res. Establishment; (2) Aivesuveru

Nippon Genshiryoku Kenkyujo JAERI,M Repoto, 1985, PAGE.137P

JOURNAL NUMBER: G0711AAF

REPORT NUMBER: JAERI-M-85-91

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:519.6

LANGUAGE: Japanese                      COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: The computer code SPLPLOT-2 for plotting and data editing has been developed as a **part** of the **code** package : SPLPACK-1. The SPLPLOT-2 code has capabilities of both conversational and batch processings. This report describes the user's manual for SPLPLOT-2. The following improvements have been made in the SPLPLOT-2. (1) It has capabilities of both conversational and batch processings, (2) function of conversion of files from the input SPL (Standard Plotter) files to internal work files have been implemented to reduce number of time consuming access to the input SPL files, (3)user supplied subroutines can be assigned for data editing from the SPL files, (4) in addition to the two-dimensional graphs, streamline graphs, contour line graphs and bird's-eye view graphs can be drawn.(author abst.)

DESCRIPTORS: data processing; editing; application program; guide book; transient phenomenon; data format; graph processing; contour line



BROADER DESCRIPTORS: information processing; treatment; action and behavior  
; computer program; software; publications; resource( **document** );  
phenomenon; type; line  
CLASSIFICATION CODE(S): JE02000J

13/5/49 (Item 1 from file: 99)  
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs  
(c) 2003 The HW Wilson Co. All rts. reserv.

1417017 H.W. WILSON RECORD NUMBER: BAST96050055

**OpenDoc says OLE to developers**

VanderVeer, Emily A;

Byte v. 21 (July '96) p. 49-50

DOCUMENT TYPE: Feature Article ISSN: 0360-5280 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: Developing OpenDoc components gives the user OLE (Object Linking and Embedding) interoperability for free. OpenDoc was designed to be open in terms of platform independence and in terms of its ability to interoperate with other compound- **document** architectures, such as OLE. If the user **codes** an OpenDoc **part** in OS/2 or Windows or on the Mac, he has an OpenDoc part and an OLE component at no extra cost and with no extra development effort.

DESCRIPTORS: Computer operating systems--Compatibility; Software portability; OLE (Computer programs);

13/5/50 (Item 1 from file: 583)  
DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.

06671940

cenicom soups up indutrial printer line

HONG KONG: PEDESTAL PRINTERS INTRODUCED IN HK

Sing Tao Daily (XKL) 13 Aug 1998 p.p21

Language: ENGLISH

Genicom has introduced the new 4840p and 4810p printer in Hong Kong. The new printers are designed for manufacturing and warehousing environments. Applications include high volume data processing, industrial graphics, bar- **codes** , multi- **part** forms as shipping **documents** , orders and invoices. The Genicom products are network-ready with support for such industry standard connections as Ethernet and Token Ring. \*

COMPANY: GENICOM

PRODUCT: Computer Peripherals (3573CP);  
EVENT: Product Design & Development (33);  
COUNTRY: Hong Kong (9HON);

| Set | Items   | Description                                                                                                                                   |
|-----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| S1  | 13274   | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -<br>OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY            |
| S2  | 477029  | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-<br>RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML<br>OR VCML |
| S3  | 1539922 | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?                                                                                        |
| S4  | 5558    | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-<br>PHER? OR ENCIPHER? OR ENCPYPER? OR CRYPT? OR CODE? ? OR CODED)               |
| S5  | 232986  | SUN()MICROSYSTEMS                                                                                                                             |
| S6  | 1888476 | S1 OR S2 OR S3                                                                                                                                |
| S7  | 304     | S6 (S) S4                                                                                                                                     |
| S8  | 483828  | S1 OR S2                                                                                                                                      |
| S9  | 53398   | S8 (S) S3                                                                                                                                     |
| S10 | 21      | S9 (S) S4                                                                                                                                     |
| S11 | 4       | S10 AND S5                                                                                                                                    |
| S12 | 13      | S10 NOT PY>1999                                                                                                                               |
| S13 | 13      | S12 NOT PD>19991021                                                                                                                           |
| S14 | 9       | RD (unique items)                                                                                                                             |
| S15 | 4       | S11 NOT PY>1999                                                                                                                               |

File 15:ABI/Inform(R) 1971-2003/Dec 09  
(c) 2003 ProQuest Info&Learning

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

File 647:CMP Computer Fulltext 1988-2003/Dec W1  
(c) 2003 CMP Media, LLC

File 275:Gale Group Computer DB(TM) 1983-2003/Dec 10  
(c) 2003 The Gale Group

File 674:Computer News Fulltext 1989-2003/Dec W1  
(c) 2003 IDG Communications

File 696:DIALOG Telecom. Newsletters 1995-2003/Dec 10  
(c) 2003 The Dialog Corp.

File 624:McGraw-Hill Publications 1985-2003/Dec 10  
(c) 2003 McGraw-Hill Co. Inc

File 636:Gale Group Newsletter DB(TM) 1987-2003/Dec 10  
(c) 2003 The Gale Group

File 484:Periodical Abs Plustext 1986-2003/Nov W5  
(c) 2003 ProQuest

File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc

File 613:PR Newswire 1999-2003/Dec 11  
(c) 2003 PR Newswire Association Inc

File 16:Gale Group PROMT(R) 1990-2003/Dec 10  
(c) 2003 The Gale Group

File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 553:Wilson Bus. Abs. FullText 1982-2003/Oct  
(c) 2003 The HW Wilson Co

15/5,K/1 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2003 CMP Media, LLC. All rts. reserv.

01159069 CMP ACCESSION NUMBER: INW19980420S0004

**Netscape Pours On The Code** (This Just In...)

INTERNETWEEK, 1998, n 711, PG7

PUBLICATION DATE: 980420

JOURNAL CODE: INW LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Table Of Contents

WORD COUNT: 129

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be the earliest to expect a new version of a Navigator/Communicator 5.0 product. Meanwhile, Netscape officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications ; Sun  
**Microsystems**

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

...officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications ; Sun  
**Microsystems**

15/5,K/2 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02253199 SUPPLIER NUMBER: 53404096 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives ) (Industry Trend or Event)**

Kingsley, Lawrence

Seybold Report on Internet Publishing, 3, 3, NA(1)

Nov, 1998

ISSN: 1090-4808

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 1547 LINE COUNT: 00124

COMPANY NAMES: **Sun Microsystems** Inc.--Officials and employees; Oracle Corp.--Officials and employees

GEOGRAPHIC CODES/NAMES: 1USA United States

DESCRIPTORS: Trade show report; Company executive

NAMED PERSONS: Ellison, Lawrence J.--Addresses, essays, lectures; Gage, John--Addresses, essays, lectures; Joy, William N.--Addresses, essays, lectures

EVENT CODES/NAMES: 010 Forecasts, trends, outlooks;240 Marketing procedures

PRODUCT/INDUSTRY NAMES: 3573000 (Computers & Peripherals)  
SIC CODES: 3571 Electronic computers  
TICKER SYMBOLS: SUNW; ORCL  
FILE SEGMENT: CD File 275

FOR JOHN GAGE, chief science officer at **Sun Microsystems**, the future of computing will represent a break from the tangled wires emblematic of today's Internet...

...can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs-namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application **code** becomes **part** of the infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a Word **document** through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

COMPANY NAMES: **Sun Microsystems Inc...**

15/5,K/3 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

06007655 Supplier Number: 53404096 (USE FORMAT 7 FOR FULLTEXT)  
**Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives ) (Industry Trend or Event)**  
Kingsley, Lawrence  
The Seybold Report on Internet Publishing, v3, n3, pNA(1)  
Nov, 1998  
ISSN: 1090-4808  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 1446  
PUBLISHER NAME: Seybold Publications, Inc.  
COMPANY NAMES: **Sun Microsystems Inc.; Oracle Corp.**  
EVENT NAMES: \*010 (Forecasts, trends, outlooks); 240 (Marketing procedures)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3573000 (Computers & Peripherals)  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation); PUBL (Publishing)  
NAICS CODES: 334111 (Electronic Computer Manufacturing)  
TICKER SYMBOLS: SUNW; ORCL  
SPECIAL FEATURES: LOB; COMPANY

FOR JOHN GAGE, chief science officer at **Sun Microsystems**, the future of computing will represent a break from the tangled wires emblematic of today's Internet...

...can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs-namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application **code** becomes **part** of the infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a

Word document through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

COMPANY NAMES: **Sun Microsystems Inc.**; Oracle Corp.

15/5,K/4 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

05567137 Supplier Number: 48432007 (USE FORMAT 7 FOR FULLTEXT)

**Netscape Pours On The Code**

InternetWeek, p7

April 20, 1998

ISSN: 1096-9969

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 131

PUBLISHER NAME: CMP Media, Inc.

COMPANY NAMES: \*Netscape Communications Corp.

EVENT NAMES: \*330 (Product information)

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)

NAICS CODES: 51121 (Software Publishers)

TICKER SYMBOLS: NSCP

SPECIAL FEATURES: LOB; COMPANY

(USE FORMAT 7 FOR FULLTEXT)

**TEXT:**

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language** ( **XML** ) parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML** 4.0 technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

...officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

14/5,K/1 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01384564 00-35551

**\*\*USE FORMAT 9 FOR FULL TEXT\*\***

**Sending and receiving email attachments**

Notess, Greg R  
Online v21n2 PP: 85-87 Mar/Apr 1997 CODEN: ONLIDN ISSN: 0146-5422  
JRNL CODE: ONL  
DOC TYPE: Journal article LANGUAGE: English LENGTH: 3 Pages  
WORD COUNT: 2776

ABSTRACT: While email continues to consist almost completely of the functional, plain ASCII text, most email programs, known as mailers, can handle the transmission of more highly formatted and complex data. Ideally, sending information in an email message should be as simple as dragging and dropping another file into the message. Unfortunately, the reality is far more complex. Multiple variables can cause a wide range of problems, which is why use of attachments is still fairly rare. For those mailers which give encoding options, the 3 most common are MIME, uuencode, and BinHex. It is easy to send binary attachments, but knowing how to send them so that the intended recipient can properly view the files can be much more complex. The recipients have their share as well. Recipients need to understand the capabilities of their mailer software. Both Netscape's new Netscape Communicator suite and Microsoft's competing products will push the move towards more feature-rich email programs.

GEOGRAPHIC NAMES: US

DESCRIPTORS: Electronic mail systems; Data transmission; Technological change; Software packages; Product development; Problems  
CLASSIFICATION CODES: 5250 (CN=Telecommunications systems); 8302 (CN=Software and computer services); 9190 (CN=United States); 7500 (CN=Product planning & development)

...TEXT: HTML ATTACHMENTS

In Netscape's Mail program, some attachments can be displayed inline. For example, send an **HTML document** as an inline attachment and Netscape Mail can display the **HTML document** just as the Web browser can. Sometimes, binary attachments of GIF or JPG images can be directly...

... success of the mail program's display is dependent on the way in which the attachment is **encoded** and marked.

**Part** of the MIME standard includes fields for Content Type and Content Disposition. Depending on how the sending...

14/5,K/2 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01155313 98-04708

**\*\*USE FORMAT 9 FOR FULL TEXT\*\***

**An electronic visit to the Department of Labor**

Krasowska, Francine  
Occupational Health & Safety v65n1 PP: 18 Jan 1996 ISSN: 0362-4064  
JRNL CODE: OHS  
DOC TYPE: Journal article LANGUAGE: English LENGTH: 1 Pages  
WORD COUNT: 808

ABSTRACT: Occupational safety professionals can find OSHA regulations and other data pertaining to the field by going online. If you have a modem and communication software on your computer, you can access the Department of Labor Bulletin Board at 202-291-4784. If you have an Internet account that

gives you access to the World Wide Web, you can check out the DOL and OSHA home pages. These are starting points in finding all kinds of interesting material. The text of the entire Code of Federal Regulations is available online.

COMPANY NAMES:

Department of Labor

OSHA

GEOGRAPHIC NAMES: US

DESCRIPTORS: Internet; Occupational safety; Federal regulation; Regulatory agencies

CLASSIFICATION CODES: 5250 (CN=Telecommunications systems); 4310 (CN=Regulation); 5340 (CN=Safety management); 9190 (CN=United States)

...TEXT: regulations, start at the OSHA home page--<http://www.osha.gov>--and proceed through "OSHA Standards & Related Documents" to the table of contents--[http://www.osha-slc.gov/OshStd\(underline\)toc/OSHA\(underline\)Std\(underline\)toc.html](http://www.osha-slc.gov/OshStd(underline)toc/OSHA(underline)Std(underline)toc.html). Clicking on any entry on this page takes you to a specific part of the code. For instance, selecting Part 1926, Safety and Health Regulations for Construction, takes you to a listing of...

... dates of these interpretations are given, so you can see the evolution of the interpretation). An interpretation document may be a letter from an OSHA official answering an inquiry as to how they should comply...

14/5,K/3 (Item 1 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2003 CMP Media, LLC. All rts. reserv.

01185687 CMP ACCESSION NUMBER: WIN19990301S0011

Web Browsers - Browsing A Revolution (News Trends)

Scot Finnie

WINDOWS MAGAZINE, 1999, n 1003, PG36

PUBLICATION DATE: 990301

JOURNAL CODE: WIN LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Windows News

WORD COUNT: 808

TEXT:

For a free product, Web browsers certainly make a lot of waves-and the tide is about to shift, yet again. Two big developments are likely to have a major impact on which browser you end up using and how future browsers will work: The pending merger between America Online and Netscape Communications, and the advent of Gecko, Netscape's new HTML-rendering engine.

COMPANY NAMES (DIALOG GENERATED): America Online ; Intuit ; Microsoft ; Netscape Communications ; Qualcomm

... model, the Gecko component- which includes a bare-bones browser program-measures just 1.6 MB. The code currently offers partial support for HTML 4.0; Netscape claims Communicator 5.0 will be complete in that regard. Gecko also supports level 1 of the Document Object Model (DOM) standard, which supports dynamic HTML and which developers use to create popular Web interfaces.

Gecko also supports Cascading Style Sheets 1 (CSS1...

14/5,K/4 (Item 2 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2003 CMP Media, LLC. All rts. reserv.

01159069 CMP ACCESSION NUMBER: INW19980420S0004

Netscape Pours On The Code (This Just In...)

INTERNETWEEK, 1998, n 711, PG7  
PUBLICATION DATE: 980420  
JOURNAL CODE: INW LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Table Of Contents  
WORD COUNT: 129  
TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be the earliest to expect a new version of a Navigator/Communicator 5.0 product. Meanwhile, Netscape officials did not comment on a published report that it is in negotiations to be acquired by Sun Microsystems.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications ; Sun Microsystems

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

14/5,K/5 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02253199 SUPPLIER NUMBER: 53404096 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives ) (Industry Trend or Event)  
Kingsley, Lawrence  
Seybold Report on Internet Publishing, 3, 3, NA(1)  
Nov, 1998  
ISSN: 1090-4808 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1547 LINE COUNT: 00124

COMPANY NAMES: Sun Microsystems Inc.--Officials and employees; Oracle Corp.--Officials and employees  
GEOGRAPHIC CODES/NAMES: 1USA United States  
DESCRIPTORS: Trade show report; Company executive  
NAMED PERSONS: Ellison, Lawrence J.--Addresses, essays, lectures; Gage, John--Addresses, essays, lectures; Joy, William N.--Addresses, essays, lectures  
EVENT CODES/NAMES: 010 Forecasts, trends, outlooks;240 Marketing procedures  
PRODUCT/INDUSTRY NAMES: 3573000 (Computers & Peripherals)  
SIC CODES: 3571 Electronic computers  
TICKER SYMBOLS: SUNW; ORCL  
FILE SEGMENT: CD File 275

... can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs-namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application code becomes part of the



infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a Word **document** through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

14/5,K/6 (Item 1 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
(c) 2003 IDG Communications. All rts. reserv.

069958

#### **Web Standards**

#### **Netscape to support standards in next browser**

Byline: Sandra Gittlen

Journal: Network World

Publication Date: October 29, 1998

Word Count: 728 Line Count: 66

#### **Text:**

... standards developed by the World Wide Web Consortium - to which both companies belong. These include specifications for **cascading style sheets**, **XML**, **HTML** Ver. 4.0 and the emerging **Document Object Model**. Last month, WaSP, an Internet group of 5,000 developers, launched a public campaign to...

... balked, but after the protest picked up steam, it acquiesced and has slated its standards-based **NGLayout code** to be **part** of the browser. **NGLayout** reads **HTML**, **JavaScript** and other coding within a **document** and determines how to display the content in the browser. "Netscape's previous rendering engine had patchwork..."

... standards," says George Olson, project leader for the Web Standards Project. "But **NGLayout** is 100% compliant with **Cascading Style Sheets Level (CSS) 1** and the **Document Object Model (DOM) Level 1**." **CSS** allows developers to control the typography of many pages simultaneously and the **DOM** allows developers to manipulate...

... won't show up or scripting error messages." Olson said one site that tried to support dynamic **HTML**, a new browser feature that allows different users to view different versions of a page based on...

... write to." For instance, Netscape says the graphical user interface could vary, but how the browser renders **HTML** code should not. Because that type of cooperation is a little ways off, Byrunn says developers should...

... trying to reach a broad audience, then they should write using features most browsers support, such as **HTML 3.0**. But if the developers want to appeal to an audience with the latest and greatest in technology, then they should write to the most recent W3C standards such as **HTML 4.0** and **CSS 2.0**. "They should not, however, write to various proprietary tags and extensions put out by vendors..."

14/5,K/7 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

04125758 Supplier Number: 54179409 (THIS IS THE FULLTEXT)

**CONTEMPORARY: Sheridan Software announces CodeAssist.**

M2 Presswire, pNA

March 22, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 510

TEXT:

M2 PRESSWIRE-22 March 1999-CONTEMPORARY: Sheridan Software announces CodeAssist (C)1994-99 M2 COMMUNICATIONS LTD

RDATE:220399

\* New code generator cuts data application development time

Contemporary plc, a key provider of information technology solutions for businesses of all sizes, announces CodeAssist from Sheridan Software Systems. This code generation software eliminates repetitive and time consuming steps from the hands-on **part** of the **code** development process using breakthrough, **template**-driven technology. It allows Visual Basic developers to create sophisticated data access routines faster and more efficiently. With CodeAssist, developers can produce robust, easily modifiable Visual Basic, **HTML** or SQL code. Current shipping date: 30 April 1999. Price: GBP 210 + VAT from Contemporary plc.

"CodeAssist is ideal for corporate developers and project managers involved in developing multi-tier or client/server applications, with databases on the back end, COM objects in the middle and a variety of front ends, including Visual Basic. This first release works with Microsoft Access and SQL Server and plans are already underway to release an additional version of CodeAssist that will include support for Oracle and Sybase databases," comments Adrian Handley, manager of Developer Solutions at Contemporary.

Highlights include:

\* More than 100 pre-built templates (including RDO, DAO, ADO, HTML and SQL) are provided for common code requirements for calling data objects from two-tier and multi-tier applications, as well as interactive browsers for accessing and manipulating databases, data objects and templates. Users can customise the pre-built templates or create their own templates as needed.

\* Developers writing in C++ or other languages where pre-built templates are not presently provided, can create their own individual templates utilising CodeAssist. Once these custom templates are created, CodeAssist ensures the same fast functionality, consistent quality, accurate replication and timesaving benefits of the included templates.

\* CodeAssist employs a familiar point-and-click database browser to pick database elements from any combination of tables and fields. These elements can then be coalesced into one or more reusable data object. The data object is then "passed through" the selected template generating the specific code desired by the developer.

\* One Button Code Generation and a simple interface reduces the learning curve so developers can quickly generate code for their applications.

\* CodeAssist gives users all the flexibility of using unbound controls with the same speed as using bound controls, by instantly generating the unbound data access code.

"Sheridan's CodeAssist helps kick start database programming with Visual Basic," summarises Tom Button, Microsoft director of marketing for developers tools.

About Contemporary: Contemporary plc (formerly Contemporary Software Ltd) delivers information technology solutions to businesses of all sizes. The company provides consultancy, training, system implementation, application development and technical support. Contemporary's Head Office is in Ascot, with a Technology Centre in Exeter and Training Centre in Windsor. For more information, visit <http://www.contemporary.co.uk>.

CONTACT: David Whitehead, Contemporary plc Tel: +44 (0)1344 873434 x 215 Fax: +44 (0)1344 872228 e-mail: [davidw@contemporary.co.uk](mailto:davidw@contemporary.co.uk) Jane Lee, Dexterity Tel: +44 (0)1273 487617 e-mail: [jane.lee@dexterity.co.uk](mailto:jane.lee@dexterity.co.uk)

\*M2 COMMUNICATIONS DISCLAIMS ALL LIABILITY FOR INFORMATION PROVIDED WITHIN M2 PRESSWIRE. DATA SUPPLIED BY NAMED PARTY/PARTIES.\*

COPYRIGHT 1999 M2 Communications

COPYRIGHT 1999 Gale Group

PUBLISHER NAME: M2 Communications

COMPANY NAMES: \*Contemporary PLC; Sheridan Software Systems Inc.

GEOGRAPHIC NAMES: \*1USA (United States); 4EUUK (United Kingdom)

PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); INTL (Business,

• International)  
SIC CODES: 7372 (Prepackaged software)  
NAICS CODES: 51121 (Software Publishers)

... Sheridan Software Systems. This code generation software eliminates repetitive and time consuming steps from the hands-on **part** of the **code** development process using breakthrough, **template**-driven technology. It allows Visual Basic developers to create sophisticated data access routines faster and more efficiently. With CodeAssist, developers can produce robust, easily modifiable Visual Basic, **HTML** or SQL code. Current shipping date: 30 April 1999. Price: GBP 210 + VAT from Contemporary plc.  
"CodeAssist...

14/5,K/8 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

06149432 Supplier Number: 53936652 (USE FORMAT 7 FOR FULLTEXT)  
**Web Browsers -- Browsing A Revolution. (Internet/Web/Online Service Information)**  
Finnie, Scot  
Windows Magazine, p36(1)  
March 1, 1999  
ISSN: 1060-1066  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; General Trade  
Word Count: 810  
PUBLISHER NAME: CMP Publications, Inc.  
COMPANY NAMES: \*Netscape Communications Corp.; America Online Inc.  
EVENT NAMES: \*330 (Product information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*7372681 (Internet Access Software); 7372630 (Workgroup Software)  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation)  
NAICS CODES: 51121 (Software Publishers)  
TICKER SYMBOLS: NSCP; AOL  
TRADE NAMES: Netscape Communicator 5.0 (Workgroup software)  
SPECIAL FEATURES: COMPANY

... model, the Gecko component-which includes a bare-bones browser program-measures just 1.6 MB. The **code** currently offers **partial** support for **HTML** 4.0; Netscape claims Communicator 5.0 will be complete in that regard. Gecko also supports level 1 of the **Document** Object Model (DOM) standard, which supports dynamic **HTML** and which developers use to create popular Web interfaces.

Gecko also supports Cascading Style Sheets 1 (CSS1...

14/5,K/9 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

05567137 Supplier Number: 48432007 (USE FORMAT 7 FOR FULLTEXT)  
**Netscape Pours On The Code**  
InternetWeek, p7  
April 20, 1998  
ISSN: 1096-9969  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 131  
PUBLISHER NAME: CMP Media, Inc.  
COMPANY NAMES: \*Netscape Communications Corp.  
EVENT NAMES: \*330 (Product information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)  
NAICS CODES: 51121 (Software Publishers)  
TICKER SYMBOLS: NSCP  
SPECIAL FEATURES: LOB; COMPANY

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Netscape Communications last week released more source **code** as **part** of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language** ( **XML** ) parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML** , Resource Description Format, **Cascading Style Sheets** and **HTML** 4.0 technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

| Set  | Items                              | Description                                                                                                                                   |
|------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| S1   | 11126                              | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -<br>OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY            |
| S2   | 135013                             | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-<br>RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML<br>OR VCML |
| S3   | 1296887                            | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?                                                                                        |
| S4   | 230                                | PARTIAL (2N) (ENCRYPT? OR CIPHER? OR CYPHER? OR ENCIPHER? OR<br>ENCYPHER? OR CRYPT?)                                                          |
| S5   | 0                                  | S1 AND S2 AND S3 AND S4                                                                                                                       |
| S6   | 0                                  | S1 AND S4                                                                                                                                     |
| S7   | 0                                  | S2 AND S4                                                                                                                                     |
| S8   | 8                                  | S3 AND S4                                                                                                                                     |
| S9   | 4                                  | S8 NOT PY>1999                                                                                                                                |
| S10  | 4                                  | S9 NOT PD>19991021                                                                                                                            |
| File | 2:INSPEC                           | 1969-2003/Nov W5<br>(c) 2003 Institution of Electrical Engineers                                                                              |
| File | 6:NTIS                             | 1964-2003/Dec W1<br>(c) 2003 NTIS, Intl Cpyrght All Rights Res                                                                                |
| File | 8:EI Compendex(R)                  | 1970-2003/Nov W5<br>(c) 2003 Elsevier Eng. Info. Inc.                                                                                         |
| File | 34:SciSearch(R)                    | Cited Ref Sci 1990-2003/Dec W1<br>(c) 2003 Inst for Sci Info                                                                                  |
| File | 35:Dissertation Abs Online         | 1861-2003/Oct<br>(c) 2003 ProQuest Info&Learning                                                                                              |
| File | 65:Inside Conferences              | 1993-2003/Dec W1<br>(c) 2003 BLDSC all rts. reserv.                                                                                           |
| File | 92:IHS Intl.Stds.& Specs.          | 1999/Nov<br>(c) 1999 Information Handling Services                                                                                            |
| File | 94:JICST-EPlus                     | 1985-2003/Dec W1<br>(c) 2003 Japan Science and Tech Corp(JST)                                                                                 |
| File | 95:TEME-Technology & Management    | 1989-2003/Nov W4<br>(c) 2003 FIZ TECHNIK                                                                                                      |
| File | 99:Wilson Appl. Sci & Tech Abs     | 1983-2003/Oct<br>(c) 2003 The HW Wilson Co.                                                                                                   |
| File | 103:Energy SciTec                  | 1974-2003/Nov B2<br>(c) 2003 Contains copyrighted material                                                                                    |
| File | 144:Pascal                         | 1973-2003/Nov W5<br>(c) 2003 INIST/CNRS                                                                                                       |
| File | 202:Info. Sci. & Tech. Abs.        | 1966-2003/Nov 17<br>(c) 2003 EBSCO Publishing                                                                                                 |
| File | 233:Internet & Personal Comp. Abs. | 1981-2003/Jul<br>(c) 2003, EBSCO Pub.                                                                                                         |
| File | 239:Mathsci                        | 1940-2003/Jan<br>(c) 2003 American Mathematical Society                                                                                       |
| File | 275:Gale Group Computer DB(TM)     | 1983-2003/Dec 10<br>(c) 2003 The Gale Group                                                                                                   |
| File | 434:SciSearch(R)                   | Cited Ref Sci 1974-1989/Dec<br>(c) 1998 Inst for Sci Info                                                                                     |
| File | 647:CMP Computer Fulltext          | 1988-2003/Dec W1<br>(c) 2003 CMP Media, LLC                                                                                                   |
| File | 674:Computer News Fulltext         | 1989-2003/Dec W1<br>(c) 2003 IDG Communications                                                                                               |
| File | 696:DIALOG Telecom. Newsletters    | 1995-2003/Dec 10<br>(c) 2003 The Dialog Corp.                                                                                                 |

10/5,K/1 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03518375 JICST ACCESSION NUMBER: 98A0294673 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); UNE HIROYUKI (1); SUIZU HISAO (2); (2)

Babuhitachinishisofutowea

Hiroshima Denki Daigaku, Hiroshima Jidosha Kogyo Tanki Daigaku Kenkyu  
Hokoku(Memoirs of the Hiroshima-Denki Institute of Technology and the  
Hiroshima Junior College of Automotive Engineering), 1997, VOL.30,  
PAGE.69-74, FIG.7, REF.6

JOURNAL NUMBER: Z0846AAR ISSN NO: 0286-0562

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02-759 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multimedia information **partial**  
**encipherment** system enables free selection of confidential information  
on the screen from a text containing **document**, charts, and so on and  
enciphering so that only those in possession of the deciphering key can  
understand the confidential information. Moreover, data of items or  
optional portions of each item can be enciphered when the data is  
entered by the terminal unit. Thus information is stored in the host  
computer in a partially enciphered state. Using this newsystem reduces  
the possibility of hackers and host operators gaining access to  
confidential information. (author abst.)

DESCRIPTORS: cryptogram; data protection; security system; access control;  
**document**; image; database; multi-media; computer security; public key  
cryptography; cryptography key

BROADER DESCRIPTORS: protection; system; control; resource( **document** );  
information media; security; guarantee

CLASSIFICATION CODE(S): JD01020V; ND02030R

**Multi-Information Partial - Encryption System.**

ABSTRACT: The newly developed multimedia information **partial**  
**encipherment** system enables free selection of confidential information  
on the screen from a text containing **document**, charts, and so on and  
enciphering so that only those in possession of the deciphering key can  
understand...

...DESCRIPTORS: **document** ;

...BROADER DESCRIPTORS: resource( **document** );

10/5,K/2 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01930536 JICST ACCESSION NUMBER: 94A0084643 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); SUIZU HISAO (1)

(1) Hiroshima Denki Inst. of Technology

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report  
(Institute of Electronics, Information and Communication Engineers),  
1993, VOL.93,NO.384(SST93 58-71), PAGE.25-30, FIG.7, REF.6

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multiple information partial encipherment  
system enables free selection of confidential information on the screen  
from a text containing **documents**, charts and images, and enciphering  
so that only those in possession of the deciphering key can understand  
the confidential information. Moreover, data from a data base system

can be transmitted to the center enciphered. Optional items or optional portions of each item can be enciphered when the data is entered by the terminal unit. Thus information is stored in the host computer in a partially enciphered state. Using this new system reduces the possibility of hackers and host operators gaining access to confidential information. (author abst.)

DESCRIPTORS: cryptogram; safety; coding(signal); secret; database; word processing; error correction; information management; computer network; OSI protocol; cryptography key

BROADER DESCRIPTORS: property; modification; signal processing; treatment; computer application; utilization; information processing; error control; control; management; communication network; information network; network; protocol; rule

CLASSIFICATION CODE(S): ND02030R

**Multi-Information Partial - Encryption System.**

...ABSTRACT: information partial encipherment system enables free selection of confidential information on the screen from a text containing documents, charts and images, and enciphering so that only those in possession of the deciphering key can understand...

10/5,K/3 (Item 3 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01306982 JICST ACCESSION NUMBER: 91A0423934 FILE SEGMENT: JICST-E  
Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

OKANO HIROKAZU (1); KOMOTO MAKOTO (1)

(1) Hiroshimabunkyojodai

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1991, VOL.1991,NO.Spring Pt 6, PAGE.6.261, FIG.1, REF.2

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80 621.391.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

DESCRIPTORS: word processing; cryptogram; coding(signal); reliability(property); error correction

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; modification; signal processing; performance; error control; control

CLASSIFICATION CODE(S): JE06000L; ND02020G

Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

10/5,K/4 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01257880 SUPPLIER NUMBER: 07126095 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**LAN E-Mail choices grow with users' need. (local area network) (Buyers' Guide) (buyers guide)**

Tracy, Martha

PC Week, v5, n46, pC21(3)

Nov 14, 1988

DOCUMENT TYPE: buyers guide ISSN: 0740-1604 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1184 LINE COUNT: 00090

ABSTRACT: The range of features available in electronic mail (e-mail) systems for local area networks (LANs) can satisfy both the novice and

power user. Buyers of LAN e-mail systems need to consider how useful advanced features would be to the majority of users on a network. Some of the enhanced features available include archival storage of messages outside the standard user mailbox, security features such as encryption and file access levels, a pop-up window notification when messages arrive, and the ability to assign a message priority level. Other new features allow users to enhance e-mail messages with advanced text-editing and data from word processing and graphics files. A list of 26 programs that cost from \$300 to \$5,200 is also included.

CAPTIONS: E-Mail enhancements. (table); LAN e-mail software. (table)

SPECIAL FEATURES: illustration; table

DESCRIPTORS: LAN; Software Selection; Computer Software Industry; E-Mail

SIC CODES: 7372 Prepackaged software

FILE SEGMENT: CD File 275

... and workstation PCs.

Some E-mail packages available today offer no encryption capabilities at all. Others offer **partial encryption** of messages without their attachments, while still others offer the possibility of total encryption, Whalen said.

Another...

...said President Bill Nussey. Users can also move, delete and replace blocks of text. In addition, external **documents** in ASCII form can be merged into an E-mail message, he said.

cc:Mail also has...

...While infrequent E-mail users may remain satisfied with the creation of standard five- or 10-line **documents**, power users will be able to manipulate text with their word processors and integrate graphics into their...



| Set  | Items                              | Description                                                                                                                           |
|------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| S1   | 11126                              | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY       |
| S2   | 135013                             | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPertext OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML OR VCML |
| S3   | 1296887                            | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?                                                                                |
| S4   | 230                                | PARTIAL (2N) (ENCRYPT? OR CIPHER? OR CYPHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT?)                                                     |
| S5   | 0                                  | S1 AND S2 AND S3 AND S4                                                                                                               |
| S6   | 0                                  | S1 AND S4                                                                                                                             |
| S7   | 0                                  | S2 AND S4                                                                                                                             |
| S8   | 8                                  | S3 AND S4                                                                                                                             |
| S9   | 4                                  | S8 NOT PY>1999                                                                                                                        |
| S10  | 4                                  | S9 NOT PD>19991021                                                                                                                    |
| File | 2:INSPEC                           | 1969-2003/Nov W5<br>(c) 2003 Institution of Electrical Engineers                                                                      |
| File | 6:NTIS                             | 1964-2003/Dec W1<br>(c) 2003 NTIS, Intl Cpyrght All Rights Res                                                                        |
| File | 8:EI Compendex(R)                  | 1970-2003/Nov W5<br>(c) 2003 Elsevier Eng. Info. Inc.                                                                                 |
| File | 34:SciSearch(R)                    | Cited Ref Sci 1990-2003/Dec W1<br>(c) 2003 Inst for Sci Info                                                                          |
| File | 35:Dissertation Abs Online         | 1861-2003/Oct<br>(c) 2003 ProQuest Info&Learning                                                                                      |
| File | 65:Inside Conferences              | 1993-2003/Dec W1<br>(c) 2003 BLDSC all rts. reserv.                                                                                   |
| File | 92:IHS Intl.Stds.& Specs.          | 1999/Nov<br>(c) 1999 Information Handling Services                                                                                    |
| File | 94:JICST-EPlus                     | 1985-2003/Dec W1<br>(c) 2003 Japan Science and Tech Corp(JST)                                                                         |
| File | 95:TEME-Technology & Management    | 1989-2003/Nov W4<br>(c) 2003 FIZ TECHNIK                                                                                              |
| File | 99:Wilson Appl. Sci & Tech Abs     | 1983-2003/Oct<br>(c) 2003 The HW Wilson Co.                                                                                           |
| File | 103:Energy SciTec                  | 1974-2003/Nov B2<br>(c) 2003 Contains copyrighted material                                                                            |
| File | 144:Pascal                         | 1973-2003/Nov W5<br>(c) 2003 INIST/CNRS                                                                                               |
| File | 202:Info. Sci. & Tech. Abs.        | 1966-2003/Nov 17<br>(c) 2003 EBSCO Publishing                                                                                         |
| File | 233:Internet & Personal Comp. Abs. | 1981-2003/Jul<br>(c) 2003, EBSCO Pub.                                                                                                 |
| File | 239:Mathsci                        | 1940-2003/Jan<br>(c) 2003 American Mathematical Society                                                                               |
| File | 275:Gale Group Computer DB(TM)     | 1983-2003/Dec 10<br>(c) 2003 The Gale Group                                                                                           |
| File | 434:SciSearch(R)                   | Cited Ref Sci 1974-1989/Dec<br>(c) 1998 Inst for Sci Info                                                                             |
| File | 647:CMP Computer Fulltext          | 1988-2003/Dec W1<br>(c) 2003 CMP Media, LLC                                                                                           |
| File | 674:Computer News Fulltext         | 1989-2003/Dec W1<br>(c) 2003 IDG Communications                                                                                       |
| File | 696:DIALOG Telecom. Newsletters    | 1995-2003/Dec 10<br>(c) 2003 The Dialog Corp.                                                                                         |

10/5,K/1 (Item 1 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03518375 JICST ACCESSION NUMBER: 98A0294673 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); UNE HIROYUKI (1); SUIZU HISAO (2); (2)

Babuhitachinishisofutowa

Hiroshima Denki Daigaku, Hiroshima Jidosha Kogyo Tanki Daigaku Kenkyu  
Hokoku(Memoirs of the Hiroshima-Denki Institute of Technology and the  
Hiroshima Junior College of Automotive Engineering), 1997, VOL.30,  
PAGE.69-74, FIG.7, REF.6

JOURNAL NUMBER: Z0846AAR ISSN NO: 0286-0562

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02-759 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multimedia information **partial**

**encipherment** system enables free selection of confidential information  
on the screen from a text containing **document**, charts, and so on and  
enciphering so that only those inpossession of the deciphering key can  
understand the confidential information. Moreover, data of items or  
optional portions of each item can be enciphered when the data is  
entered by the terminal unit. Thus information is stored in the host  
computerin a partially enciphered state. Using this newsystem reduces  
the possibility of hackers and host operators gaining access to  
confidential information. (author abst.)

DESCRIPTORS: cryptogram; data protection; security system; access control;  
**document**; image; database; multi-media; computer security; public key  
cryptography; cryptography key

BROADER DESCRIPTORS: protection; system; control; resource( **document** );  
information media; security; guarantee

CLASSIFICATION CODE(S): JD01020V; ND02030R

**Multi-Information Partial - Encryption System.**

ABSTRACT: The newly developed multimedia information **partial**

**encipherment** system enables free selection of confidential information  
on the screen from a text containing **document**, charts, and so on and  
enciphering so that only those inpossession of the deciphering key can  
understand...

...DESCRIPTORS: **document** ;

...BROADER DESCRIPTORS: resource( **document** );

10/5,K/2 (Item 2 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01930536 JICST ACCESSION NUMBER: 94A0084643 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); SUIZU HISAO (1)

(1) Hiroshima Denki Inst. of Technology

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report  
(Institute of Electronics, Information and Communication Enginners),  
1993, VOL.93,NO.384(SST93 58-71), PAGE.25-30, FIG.7, REF.6

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multiple information partical encipherment  
system enables free selection of confidential information on the screen  
from a text containing **documents**, charts and images, and enciphering  
so that only those in possession of the deciphering key can understand  
the confidential information. Moreover, data from a data base system

can be transmitted to the center enciphered. Optional items or optional portions of each item can be enciphered when the data is entered by the terminal unit. Thus information is stored in the host computer in a partially enciphered state. Using this new system reduces the possibility of hackers and host operators gaining access to confidential information. (author abst.)

DESCRIPTORS: cryptogram; safety; coding(signal); secret; database; word processing; error correction; information management; computer network; OSI protocol; cryptography key

BROADER DESCRIPTORS: property; modification; signal processing; treatment; computer application; utilization; information processing; error control; control; management; communication network; information network; network; protocol; rule

CLASSIFICATION CODE(S): ND02030R

**Multi-Information Partial - Encryption System.**

...ABSTRACT: information partial encipherment system enables free selection of confidential information on the screen from a text containing documents, charts and images, and enciphering so that only those in possession of the deciphering key can understand...

10/5,K/3 (Item 3 from file: 94)

DIALOG(R) File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01306982 JICST ACCESSION NUMBER: 91A0423934 FILE SEGMENT: JICST-E  
Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

OKANO HIROKAZU (1); KOMOTO MAKOTO (1)

(1) Hiroshimabunkyojodai

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1991, VOL.1991,NO.Spring Pt 6, PAGE.6.261, FIG.1, REF.2

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80 621.391.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

DESCRIPTORS: word processing; cryptogram; coding(signal); reliability(property); error correction

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; modification; signal processing; performance; error control; control

CLASSIFICATION CODE(S): JE06000L; ND02020G

Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

10/5,K/4 (Item 1 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

(c) 2003 The Gale Group. All rts. reserv.

01257880 SUPPLIER NUMBER: 07126095 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**LAN E-Mail choices grow with users' need. (local area network) (Buyers' Guide) (buyers guide)**

Tracy, Martha

PC Week, v5, n46, pC21(3)

Nov 14, 1988

DOCUMENT TYPE: buyers guide ISSN: 0740-1604 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1184 LINE COUNT: 00090

ABSTRACT: The range of features available in electronic mail (e-mail) systems for local area networks (LANs) can satisfy both the novice and

power user. Buyers of LAN e-mail systems need to consider how useful advanced features would be to the majority of users on a network. Some of the enhanced features available include archival storage of messages outside the standard user mailbox, security features such as encryption and file access levels, a pop-up window notification when messages arrive, and the ability to assign a message priority level. Other new features allow users to enhance e-mail messages with advanced text-editing and data from word processing and graphics files. A list of 26 programs that cost from \$300 to \$5,200 is also included.

CAPTIONS: E-Mail enhancements. (table); LAN e-mail software. (table)

SPECIAL FEATURES: illustration; table

DESCRIPTORS: LAN; Software Selection; Computer Software Industry; E-Mail

SIC CODES: 7372 Prepackaged software

FILE SEGMENT: CD File 275

... and workstation PCs.

Some E-mail packages available today offer no encryption capabilities at all. Others offer **partial encryption** of messages without their attachments, while still others offer the possibility of total encryption, Whalen said.

Another...

...said President Bill Nussey. Users can also move, delete and replace blocks of text. In addition, external **documents** in ASCII form can be merged into an E-mail message, he said.

cc:Mail also has...

...While infrequent E-mail users may remain satisfied with the creation of standard five- or 10-line **documents**, power users will be able to manipulate text with their word processors and integrate graphics into their...

| Set  | Items                              | Description                                                                       |
|------|------------------------------------|-----------------------------------------------------------------------------------|
| S1   | 5012                               | AU=(HIND, J? OR HIND J? OR PETERS, M? OR PETERS M? OR TOPO-<br>L, B? OR TOPOL B?) |
| S2   | 0                                  | S1 AND STYLE() SHEET                                                              |
| S3   | 0                                  | S1 AND KEY() RECOVERY                                                             |
| File | 2:INSPEC                           | 1969-2003/Nov W5<br>(c) 2003 Institution of Electrical Engineers                  |
| File | 6:NTIS                             | 1964-2003/Dec W1<br>(c) 2003 NTIS, Intl Cpyrght All Rights Res                    |
| File | 8:EI Compendex(R)                  | 1970-2003/Nov W5<br>(c) 2003 Elsevier Eng. Info. Inc.                             |
| File | 34:SciSearch(R)                    | Cited Ref Sci 1990-2003/Nov W5<br>(c) 2003 Inst for Sci Info                      |
| File | 35:Dissertation Abs Online         | 1861-2003/Oct<br>(c) 2003 ProQuest Info&Learning                                  |
| File | 65:Inside Conferences              | 1993-2003/Dec W1<br>(c) 2003 BLDSC all rts. reserv.                               |
| File | 92:IHS Intl.Stds.& Specs.          | 1999/Nov<br>(c) 1999 Information Handling Services                                |
| File | 94:JICST-EPlus                     | 1985-2003/Dec W1<br>(c) 2003 Japan Science and Tech Corp(JST)                     |
| File | 95:TEME-Technology & Management    | 1989-2003/Nov W4<br>(c) 2003 FIZ TECHNIK                                          |
| File | 99:Wilson Appl. Sci & Tech Abs     | 1983-2003/Oct<br>(c) 2003 The HW Wilson Co.                                       |
| File | 103:Energy SciTec                  | 1974-2003/Nov B2<br>(c) 2003 Contains copyrighted material                        |
| File | 144:Pascal                         | 1973-2003/Nov W5<br>(c) 2003 INIST/CNRS                                           |
| File | 202:Info. Sci. & Tech. Abs.        | 1966-2003/Nov 17<br>(c) 2003 EBSCO Publishing                                     |
| File | 233:Internet & Personal Comp. Abs. | 1981-2003/Jul<br>(c) 2003, EBSCO Pub.                                             |
| File | 239:Mathsci                        | 1940-2003/Jan<br>(c) 2003 American Mathematical Society                           |
| File | 275:Gale Group Computer DB(TM)     | 1983-2003/Dec 09<br>(c) 2003 The Gale Group                                       |
| File | 434:SciSearch(R)                   | Cited Ref Sci 1974-1989/Dec<br>(c) 1998 Inst for Sci Info                         |
| File | 647:CMP Computer Fulltext          | 1988-2003/Dec W1<br>(c) 2003 CMP Media, LLC                                       |
| File | 674:Computer News Fulltext         | 1989-2003/Dec W1<br>(c) 2003 IDG Communications                                   |
| File | 696:DIALOG Telecom. Newsletters    | 1995-2003/Dec 09<br>(c) 2003 The Dialog Corp.                                     |

| Set | Items | Description                                                                       |
|-----|-------|-----------------------------------------------------------------------------------|
| S1  | 619   | AU=(HIND, J? OR HIND J? OR PETERS, M? OR PETERS M? OR TOPO-<br>L, B? OR TOPOL B?) |
| S2  | 46    | S1 AND IC=H04L?                                                                   |
| S3  | 5     | S1 AND STYLE() SHEET?                                                             |
| S4  | 50    | S2 OR S3                                                                          |

File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)  
(c) 2003 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2003/Nov W05  
(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031203,UT=20031127  
(c) 2003 WIPO/Univentio

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200379  
(c) 2003 Thomson Derwent

Total word count - documents A + B 9879

4/5/6 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01237014

**METHOD AND APPARATUS FOR INITIALIZING SECURE COMMUNICATIONS AMONG, AND FOR EXCLUSIVELY PAIRING WIRELESS DEVICES**  
**VERFAHREN UND VORRICHTUNG ZUM INITIALISIEREN VON SICHEREN VERBINDUNGEN ZWISCHEN UND NUR ZWISCHEN ZUEINANDERGEHORENDEN SCHNURLOSEN EINRICHTUNGEN**  
**PROCEDE ET APPAREIL PERMETTANT D'INITIALISER DES COMMUNICATIONS PROTEGEES ENTRE DES DISPOSITIFS HERTZIENS APPARIES ET EXCLUSIVEMENT ENTRE CEUX-CI**  
PATENT ASSIGNEE:

International Business Machines Corporation, (200128), New Orchard Road, Armonk, NY 10504, (US), (Applicant designated States: all)

INVENTOR:

**HIND, John, Raithel** , 5408 Harrington Grove Drive, Raleigh, NC 27613, (US)

**PETERS, Marcia, Lambert** , 712 Lochgarton Lane, Raleigh, NC 27614, (US)  
LEGAL REPRESENTATIVE:

Ling, Christopher John et al (80401), IBM United Kingdom Limited, Intellectual Property Department, Hursley Park, Winchester, Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 1179244 A1 020213 (Basic)  
WO 200072506 001130

APPLICATION (CC, No, Date): EP 2000935289 000522; WO 2000GB1940 000522  
PRIORITY (CC, No, Date): US 316805 990521; US 316804 990521; US 316686 990521

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **H04L-009/32**

CITED PATENTS (WO A): DE 19730301 C ; US 5621798 A

NOTE:

No A-document published by EPO

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010124 A1 International application. (Art. 158(1))

Application: 010124 A1 International application entering European phase

Application: 020213 A1 Published application with search report

Examination: 020213 A1 Date of request for examination: 20011203

LANGUAGE (Publication,Procedural,Application): English; English; English

4/5/7 (Item 4 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00774762

**Transaction message routing in digital communications networks**  
**Weglenkung von Transaktionsnachrichten in einem digitalen Kommunikationsnetz**  
**Acheminement de messages de transaction dans un reseau numerique de communication**  
PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY 10504, (US), (Proprietor designated states: all)

INVENTOR:

Blakeley, Douglas Burnette, 1612 Stonehurst Rd, Raleigh NC 27607, (US)  
Kingston, William Anthony, 25 Hiltingbury Rd, Chandlersford, Hampshire, (GB)

**Hind, John Raithel** , 5408 Harrington Grove Drive, Raleigh NC 27613, (US)  
Housel III, Barron Cornelius, 702 Kensington Drive, Chapel Hill, NC 27514 , (US)

LEGAL REPRESENTATIVE:

de Pena, Alain et al (15151), Compagnie IBM France Departement de la  
Propriete Intellectuelle, 06610 La Gaude, (FR)  
PATENT (CC, No, Kind, Date): EP 725523 A2 960807 (Basic)  
EP 725523 A3 970806  
EP 725523 B1 030723  
APPLICATION (CC, No, Date): EP 95480177 951206;  
PRIORITY (CC, No, Date): US 369051 950105  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: H04L-012/56  
CITED PATENTS (EP B): EP 282198 A; EP 608653 A; GB 2268374 A; US 5105424 A

ABSTRACT EP 725523 A2

Packet messages transmitted on a packet communications network include origin and destination addresses in the form of stacked address elements which can be pushed or popped off of the stack. A plurality of interconnected packet communications network include routing nodes which utilize the top address element on the destination stack to route the message. Such routing nodes also include stack element editing facilities for popping elements from the stacks, constructing new elements to be pushed onto the stacks, and amending the contents of elements on the stack. This arrangement allows messages to be launched on the networks where the originating station does not have full knowledge of the destination station, and the routing nodes add the necessary destination information as it becomes necessary for routing.  
(see image in original document)

ABSTRACT WORD COUNT: 151

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 020417 A2 Date of dispatch of the first examination  
report: 20020305  
Application: 960807 A2 Published application (A1with Search Report  
;A2without Search Report)  
Grant: 030723 B1 Granted patent  
Examination: 970122 A2 Date of filing of request for examination:  
961125  
Change: 970319 A2 Representative (change)  
Search Report: 970806 A3 Separate publication of the European or  
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPAB96 | 349        |
| CLAIMS B                           | (English) | 200330 | 345        |
| CLAIMS B                           | (German)  | 200330 | 363        |
| CLAIMS B                           | (French)  | 200330 | 365        |
| SPEC A                             | (English) | EPAB96 | 6789       |
| SPEC B                             | (English) | 200330 | 6810       |
| Total word count - document A      |           |        | 7139       |
| Total word count - document B      |           |        | 7883       |
| Total word count - documents A + B |           |        | 15022      |

4/5/8 (Item 5 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00629087

Packet switching resource management within nodes.

Paketvermittlungs-Betriebsmittelverwaltung in Knoten.

Gestion de ressources de commutation de paquets dans des noeuds.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:



Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)  
Dudley, John Gary, 6113 Gainsborough Drive, Raleigh, NC 27612, (US)  
Kaplan, Marc Adam, 14 Holly Hill Lane, Katonah, NY 10536, (US)  
Drake Jr., John Ellis, 321 Fearrington, Pittsboro, NC 27312, (US)  
Guerin, Roch, Scenic View 4H, Yorktown Heights, NY 10598, (US)  
Marin, Gerald Arnold, 3704 Sweeten Creek Road, Chapel Hill, NC 27514,  
(US)

**Peters, Maria Lambert** , 6 New Hope Trails, Pittsboro, NC 27312, (US)  
LEGAL REPRESENTATIVE:

Etorre, Yves Nicolas (87831), Compagnie IBM France, Departement Propriete  
Intellectuelle, 06610 La Gaude, (FR)  
PATENT (CC, No, Kind, Date): EP 613316 A2 940831 (Basic)  
EP 613316 A3 950412  
APPLICATION (CC, No, Date): EP 93480229 931215;  
PRIORITY (CC, No, Date): US 10136 930128  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: H04Q-011/04; **H04L-012/56 ; H04L-012/18**

ABSTRACT EP 613316 A2

Method and apparatus for making limited internal-node communication facilities externally visible in a packet switching network. Internal-node communication facilities are called intranode links, can include any cable, channel, bus, etc. over which data passes, and are used to connect the multiple subnodes within a given node. Each subnode contains a switching mechanism and routes packets to other nodes, subnodes, or user applications. Each node provides network control functions such as topology, directory, path selection, and bandwidth management which can manage intranode links in the same manner that internode links are currently managed. (see image in original document)

ABSTRACT WORD COUNT: 100

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 940831 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Examination: 950125 A2 Date of filing of request for examination:  
941125  
Change: 950329 A2 Obligatory supplementary classification  
(change)  
Search Report: 950412 A3 Separate publication of the European or  
International search report  
Examination: 970903 A2 Date of despatch of first examination report:  
970717  
Change: 981111 A2 Representative (change)  
Withdrawal: 990728 A2 Date on which the European patent application  
was deemed to be withdrawn: 990130

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF2 | 978        |
| SPEC A                             | (English) | EPABF2 | 5180       |
| Total word count - document A      |           |        | 6158       |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 6158       |

**4/5/9 (Item 6 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00605930

**Forming and maintaining access groups at the Lan/Wan interface**

**Bildung und Aufrechterhaltung von Zugriffsgruppen an der Lan/Wan  
Schnittstelle**

**Formation et maintien des groupes d'accès à l'interface Lan/Wan**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

**INVENTOR:**

Sandick, Haldon J., 2015 Wilson Street, Durham, NC 27705, (US)  
Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)  
Doeringer, Willibald A., Sihlwaldstrasse 4, Langnau, (CH)  
Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
Dykeman, Douglas H., Loostrasse 15/43, CH-8803 Rueschlikon, (CH)  
Li, Liang, 3613 Sweeten Creek Road, Chapel Hill, NC 27514, (US)  
**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)

**LEGAL REPRESENTATIVE:**

Etorre, Yves Nicolas (87832), Compagnie IBM France Departement Propriete  
Intellectuelle Le Plan du Bois, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 598674 A1 940525 (Basic)  
EP 598674 B1 020807

APPLICATION (CC, No, Date): EP 93480165 931019;

PRIORITY (CC, No, Date): US 976826 921116

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **H04L-012/66**

CITED PATENTS (EP B): EP 234191 A; EP 511142 A

**CITED REFERENCES (EP B):**

IEEE TRANSACTIONS ON COMMUNICATIONS vol. 28, no. 4, April 1980, NEW  
YORK US pages 539 - 552 SCHWARTZ ET AL. 'Routing Techniques Used in  
Computer Communication Networks'

IEEE NETWORK: THE MAGAZINE OF COMPUTER COMMUNICATIONS no. 5, September  
1991, NEW YORK US pages 12 - 16 XP248468 BARRETT ET AL. 'LAN  
Interconnect Using X.25 Network Services';

**ABSTRACT EP 598674 A1**

Access agents (AA1-AA5) in nodes at the LAN/WAN interface are formed into a group of access agents so that the access agents may be managed by the WAN as a group. The group must maintain group operation integrity in that if communications between agents in the group are broken, the access agents will coalesce into subgroups and continue performing communication jobs as a group activity. Each of the access agents contains a finite state machine to perform the tasks of group formation and maintenance. The formation of interconnected access agents into a group is accomplished by one access agent being identified as a group leader. All other access agents communicating with the group leader within the LAN may then join the group. The maintenance of group activity integrity is accomplished by detecting a break in group communication integrity and thereafter reforming the group into multiple smaller groups. The maintenance of group operation integrity also includes the merger of small groups into a large group when a bridge is added between LAN segments. (see image in original document)

ABSTRACT WORD COUNT: 179

**NOTE:**

Figure number on first page: 1

**LEGAL STATUS (Type, Pub Date, Kind, Text):**

Grant: 020807 B1 Granted patent  
Application: 940525 A1 Published application (A1with Search Report  
;A2without Search Report)  
Oppn None: 030730 B1 No opposition filed: 20030508  
Examination: 941123 A1 Date of filing of request for examination:  
940927  
Examination: 971210 A1 Date of despatch of first examination report:  
971023  
Change: 990428 A1 Representative (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

| Available Text                | Language  | Update | Word Count |
|-------------------------------|-----------|--------|------------|
| CLAIMS A                      | (English) | EPABF2 | 1247       |
| CLAIMS B                      | (English) | 200232 | 1620       |
| CLAIMS B                      | (German)  | 200232 | 1620       |
| CLAIMS B                      | (French)  | 200232 | 2014       |
| SPEC A                        | (English) | EPABF2 | 5448       |
| SPEC B                        | (English) | 200232 | 5388       |
| Total word count - document A |           |        | 6697       |

Total word count - document B 10642  
Total word count - documents A + B 17339

4/5/10 (Item 7 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00605851

**Function distribution in a packet switched network**

**Funktionsverteilung im Paketvermittlungsnetz**

**Distribution de fonction dans un reseau de commutation de paquets**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Derby, Jeffrey Haskell, 104 Foxridge Court, Chapel Hill, NC 27514, (US)

Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)

Dudley, John Gary, 6113 Gainsborough Drive, Raleigh, NC 27612, (US)

Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)

Janniello, James Patrick, 41 Ashton Road, Stamford, CT 06905, (US)

Kaplan, Marc Adam, 14 Holly Hill Lane, Katonah, NY 10536, (US)

Kesner, Barry, 5507 Shadowbrook Drive, Raleigh, NC 27612, (US)

Koperda, Francis Richard, 2020 Corberrie Lane, Raleigh, NC 27613, (US)

**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)

Potter, Kenneth Harvey, Jr., 5404 Amsterdam Place, Raleigh, NC 27606,  
(US)

Tsigler, Andrey Lev, Ducal S113 Marina baie des Anges, F-06270 Villeneuve  
Loubet, (FR)

Marin, Gerald Arnold, 3704 Sweeten Creek Road, Chapel Hill, NC 27514,  
(US)

Gopal, Inder Sarat, 555 North Avenue, Apt. 19N, Fort Lee, NJ 07024, (US)

Cidon, Israel, Technion - I.I.T. Elec. eng. dept., IL-Haifa 32000, (IL)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de Propriete  
Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 598671 A2 940525 (Basic)

EP 598671 A3 950125

EP 598671 B1 011212

APPLICATION (CC, No, Date): EP 93480067 930603;

PRIORITY (CC, No, Date): US 978609 921119

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: **H04L-012/56** ; **H04L-012/18** ; H04Q-011/04

CITED PATENTS (EP B): EP 303830 A; EP 404339 A; US 4813038 A

ABSTRACT EP 598671 A2

A packet switched communication system employing ANR and/or multicast tree routing is improved by using a Copy ID field in the network header of the packet. The Copy ID field defines a control function and allows packet processing to be distributed among the several processors of each node. The selection of the processor (or processors) to receive the packet may be accomplished by making use of the routing field of the network header to qualify the control function specified in the Copy ID field. The control message is processed as defined for the control function by the processor receiving the packet. In multicast tree routing the control function is performed at all nodes in the multicast tree. In ANR routing, a prefacing "selective copy" bit is included in each label in the routing field of the network header; each node employed in the packet transmission path uses one label. The selective copy bit in each label triggers or not (according to its setting) the copy function in that node. The network control function specified in the Copy ID field may be performed in a given node when the copy function is triggered for that node. (see image in original document)

ABSTRACT WORD COUNT: 202

NOTE:

Figure number on first page: 4

## LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 011212 B1 Granted patent  
 Application: 940525 A2 Published application (Alwith Search Report  
 ;A2without Search Report)  
 Lapse: 030924 B1 Date of lapse of European Patent in a  
 contracting state (Country, date): CH  
 20020630, LI 20020630,  
 Oppn None: 021204 B1 No opposition filed: 20020913  
 Examination: 941123 A2 Date of filing of request for examination:  
 940927  
 Search Report: 950125 A3 Separate publication of the European or  
 International search report  
 Examination: 980610 A2 Date of despatch of first examination report:  
 980423

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF2 | 1114       |
| CLAIMS B                           | (English) | 200150 | 695        |
| CLAIMS B                           | (German)  | 200150 | 764        |
| CLAIMS B                           | (French)  | 200150 | 784        |
| SPEC A                             | (English) | EPABF2 | 4926       |
| SPEC B                             | (English) | 200150 | 4925       |
| Total word count - document A      |           |        | 6040       |
| Total word count - document B      |           |        | 7168       |
| Total word count - documents A + B |           |        | 13208      |

4/5/11 (Item 8 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00576199

**Multicast communication tree creation and control method and apparatus**  
**Verfahren und Vorrichtung zur Bildung und Steuerung eines**  
**Mehrempfängerübertragungsbaums**  
**Methode et appareil pour la creation et le controle d'un arbre de**  
**communication multidestinataire**

## PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
 Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

## INVENTOR:

Auerbach, Joshua Seth, 20 Rolling Ridge Road, Ridgefield, CT 06877, (US)  
 Chow, Chee-Seng, 26 Prospect Avenue, 2nd Floor, Ossining, NY 10562, (US)  
**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)  
 Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
 Gopal, Prabandham Madan, 1043 Black Oak Ridge Road, Wayne, NJ 07470, (US)  
 Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)  
 Kaplan, Marc Adam, RFD 5 Holly Hill Lane, Katonah, NY 10536, (US)

## LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de Propriete  
 Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 575281 A2 931222 (Basic)  
 EP 575281 A3 960214  
 EP 575281 B1 991117

APPLICATION (CC, No, Date): EP 93480060 930519;

PRIORITY (CC, No, Date): US 900628 920618

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: **H04L-012/18**

CITED PATENTS (EP B): EP 180990 A

## CITED REFERENCES (EP B):

INTERNATIONAL CONFERENCE ON DISTRIBUTED COMPUTING SYSTEMS, ARLINGTON,  
 TEXAS, MAY 20 - 24, 1991, no. CONF. 11, 20 May 1991 INSTITUTE OF  
 ELECTRICAL AND ELECTRONICS ENGINEERS, pages 231-238, XP 000221861  
 AUERBACH J ET AL 'MULTICAST GROUP MEMBERSHIP MANAGEMENT IN HIGH SPEED  
 WIDE AREA NETWORKS'  
 MICROPROCESSORS AND MICROSYSTEMS, vol. 13, no. 9, 1 November 1989 pages

563-568, XP 000081216 HUGHES L 'SURVEY OF MULTICAST ADDRESS HANDLING  
TECHNIQUES FOR ETHERNET COMMUNICATION CONTROLLERS'  
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATION, vol. 9, no. 9, 1  
December 1991 pages 1427-1439, XP 000267533 SEGALL A ET AL 'RELIABLE  
MULTIUSER TREE SETUP WITH LOCAL IDENTIFIERS';

ABSTRACT EP 575281 A2

In a multicast network communication system, administration of the communication path making up the multicast tree itself has been separated from control and administration of the network. Creation of a multicast distribution tree and control over the membership thereof, is separately controlled independently from the creation and use of the tree transmission path used to communicate among the members of a multicast set. Transmission distribution trees are set up when a transmission request is received and the properties of the transmission path that is required are known. Transmission paths are created and controlled by all nodes in the communications system, each node having necessary control code and processors for responding to requests from set members to transmit a message to groups of users by creating and activating the necessary tree communication path distribution linkages. A distribution tree is created by the Tree Leader by generating a tree address using a random number generator. A tree address correlator is generated utilizing network and node identifiers unique for the network, and a list of subnodes or users connected for each member of the multicast tree set is generated. Using this information, a tree distribution path is computed to cover all of the subnodes required and a tree set up request message is sent by the Tree Leader along a computed path to each involved subnode. Each subnode returns a message indicating whether the tree address is already in use or is available for use. Successfully negotiated tree addresses are marked at the path link initiation and termination points at each node through the network.  
(see image in original document)

ABSTRACT WORD COUNT: 304

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

|                |        |    |                                                                                                                                                        |
|----------------|--------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lapse:         | 001025 | B1 | Date of lapse of European Patent in a contracting state (Country, date): BE 19991117,                                                                  |
| Application:   | 931222 | A2 | Published application (Alwith Search Report ;A2without Search Report)                                                                                  |
| Lapse:         | 020626 | B1 | Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117, ES 19991117, SE 19991117, |
| Lapse:         | 001227 | B1 | Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117,                           |
| Lapse:         | 001213 | B1 | Date of lapse of European Patent in a contracting state (Country, date): BE 19991117, CH 20000222, LI 20000222,                                        |
| Oppn None:     | 001102 | B1 | No opposition filed: 20000818                                                                                                                          |
| Lapse:         | 001220 | B1 | Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 20000222, LI 20000222,                           |
| Lapse:         | 020605 | B1 | Date of lapse of European Patent in a contracting state (Country, date): AT 19991117, BE 19991117, CH 19991117, LI 19991117, SE 19991117,              |
| Examination:   | 940629 | A2 | Date of filing of request for examination: 940429                                                                                                      |
| Search Report: | 960214 | A3 | Separate publication of the European or International search report                                                                                    |
| Examination:   | 980617 | A2 | Date of despatch of first examination report:                                                                                                          |

980504

Grant: 991117 B1 Granted patent  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:  
Available Text Language Update Word Count  
CLAIMS B (English) 9946 1088  
CLAIMS B (German) 9946 1120  
CLAIMS B (French) 9946 1326  
SPEC B (English) 9946 9386  
Total word count - document A 0  
Total word count - document B 12920  
Total word count - documents A + B 12920

4/5/12 (Item 9 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00576196

**Distributed management communications network**  
**Kommunikationsnetz mit verteilter Verwaltung**  
**Reseau de communications de gestion distribuee**  
PATENT ASSIGNEE:

International Business Machines Corporation, (200120), New Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Auerbach, Joshua Seth, 20 Rolling Ridge Road, Ridgefield, CT 06877, (US)  
Drake, John Ellis, Jr., 321 Fearrington, Pittsboro, NC 27312, (US)  
Gopal, Prabandham Madan, 1043 Black Oak Ridge Road, Wayne, NJ 07470, (US)  
Hervatic, Elizabeth Anne, 4908 Matlock Street, Apex, NC 27502, (US)  
Kaplan, Marc Adam, RFD 5 Holly Hill Lane, Katonah, NY 10536, (US)  
Kutten, Shay, 41 Lenox Street, Rockaway, NJ 07866, (US)  
**Peters, Marcia Lambert**, 6 New Hope Trails, Pittsboro, NC 27312, (US)  
Ward, Michael James, 25 West Park Avenue, New Haven, CT 06511, (US)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de la Propriete  
Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 575279 A2 931222 (Basic)  
EP 575279 A3 940817  
EP 575279 B1 030723

APPLICATION (CC, No, Date): EP 93480056 930505;

PRIORITY (CC, No, Date): US 900647 920618

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: **H04L-012/24 ; H04L-012/18 ; H04L-012/56**

CITED PATENTS (EP B): EP 361649 A

CITED REFERENCES (EP B):

IBM TECHNICAL DISCLOSURE BULLETIN vol. 34, no. 8 , January 1992 , US  
pages 68 - 71 XP302049 'SCOPING MULTICASTS IN WAN INTERCONNECTED LOCAL  
NETWORKS';

ABSTRACT EP 575279 A2

A multinode, multicast communications network has a distributed control for the creation, administration and operational mode selection operative in each of the nodes of the network. Each node is provided with a Set Manager for controlling either creation of, administration or access to a set of users to whom a multicast is to be directed. The Set Manager maintains a record of the local membership of all users associated with the node in which the Set Manager resides. A given Set Manager for each designated set of users is assigned the task of being the Set Leader to maintain membership information about the entire set of users in the multicast group. One of the Set Managers in the communications network is designated to be the Registrar which maintains a list of all the Set Leaders in the network. The Registrar insures that there is one and only one Set Leader for each set of users, answers inquiries about the membership of the sets and directs inquiries to appropriate Set Leaders if necessary. All of the set creation, administration and control functions can therefore be carried out by any node of the system and

provision is made to assume the function at a new node when failure or partition in the network occurs. (see image in original document)

ABSTRACT WORD COUNT: 219

NOTE:

Figure number on first page: 2A

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 030723 B1 Granted patent  
Application: 931222 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Examination: 940629 A2 Date of filing of request for examination:  
940429  
Search Report: 940817 A3 Separate publication of the European or  
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | EPABF1 | 514        |
| CLAIMS B                           | (English) | 200330 | 514        |
| CLAIMS B                           | (German)  | 200330 | 433        |
| CLAIMS B                           | (French)  | 200330 | 624        |
| SPEC A                             | (English) | EPABF1 | 9441       |
| SPEC B                             | (English) | 200330 | 9355       |
| Total word count - document A      |           |        | 9956       |
| Total word count - document B      |           |        | 10926      |
| Total word count - documents A + B |           |        | 20882      |

4/5/13 (Item 1 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

01019938

**SMARTCARD SYSTEM**

**SYSTEME DE CARTE INTELLIGENTE**

Patent Applicant/Assignee:

ECEBS LIMITED, Ecebs House, 68 Dobcroft Road, Millhouses Sheffield,  
South Yorkshire S7 2LS, GB, GB (Residence), GB (Nationality), (For all  
designated states except: US)

Patent Applicant/Inventor:

BRESLIN Anthony, 21 Strathnairn Avenue, East Kilbride, Scotland G75 8FW,  
GB, GB (Residence), GB (Nationality), (Designated only for: US)

**PETERS Michael**, 36 Boghead Road, Lenzie, Glasgow, Scotland G66 4EE, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

HOCHFELD Barry Sim, 21 Dalserf Crescent, Giffnock, Scotland G46 6RB, GB,  
GB (Residence), GB (Nationality), (Designated only for: US)

Legal Representative:

HARLAND Linda J (agent), Reddie & Grose, 16 Theobalds Road, London WC1X  
8PL, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200349056 A2 20030612 (WO 0349056)

Application: WO 2002GB5565 20021209 (PCT/WO GB0205565)

Priority Application: GB 200129360 20011207; GB 200225036 20021028

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G07F-019/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

French Abstract

Les systemes de telecommunication connus, qui comprennent un terminal Internet (1, 2, 6, 7) et un reseau qui permet de fournir un acces/service Internet offrent un nombre limite de possibilites utilisateur, que l'on peut augmenter par l'introduction de dependances vis a vis de l'utilisateur dans la conversion d'un (d'une partie d'un) localisateur de ressources universel ou URL dans une adresse IP. Cette adresse IP definit les informations a fournir audit terminal (1, 2, 6, 7), actuellement en fonction de l'utilisateur, par exemple en fonction de la localisation et/ou en fonction du temps. Des informations sur la localisation [Serveur de nom de domaine ou DNS (32, 42, 52, 93) avec contenu en fonction de la localisation, point de presence ou informations POP, adresse IP du terminal, numero de telephone du terminal, identificateur de l'utilisateur, systeme de positionnement global ou informations GPS, controleur de station de base ou informations BSC (90), codes de zones entres par ledit utilisateur] partant dudit reseau ou dudit terminal (1, 2, 6, 7) et/ou des informations sur la synchronisation, provenant habituellement dudit reseau, y sont utilisees.

Legal Status (Type, Date, Text)

Publication 20011220 A1 With international search report.

Publication 20011220 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

4/5/15 (Item 3 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00759083 \*\*Image available\*\*

**METHOD AND APPARATUS FOR INITIALIZING SECURE COMMUNICATIONS AMONG, AND FOR EXCLUSIVELY PAIRING WIRELESS DEVICES**

**PROCEDE ET APPAREIL PERMETTANT D'INITIALISER DES COMMUNICATIONS PROTEGEES ENTRE DES DISPOSITIFS HERTZIENS APPARIES ET EXCLUSIVEMENT ENTRE CEUX-CI**

Patent Applicant/Assignee:

INTERNATIONAL BUSINESS MACHINES CORPORATION, New Orchard Road, Armonk, NY 10504, US, US (Residence), US (Nationality), (Designated only for: MC)

IBM UNITED KINGDOM LIMITED, P.O. Box 41, North Harbour, Portsmouth, Hampshire PO6 3AU, GB, GB (Residence), GB (Nationality), (Designated only for: MC)

Inventor(s):

**HIND John Raithel** , 5408 Harrington Grove Drive, Raleigh, NC 27613, US

**PETERS Marcia Lambert** , 712 Lochgarton Lane, Raleigh, NC 27614, US

Legal Representative:

LING Christopher John, IBM United Kingdom Limited, Intellectual Property Law Dept., Hursley Park, Winchester, Hampshire SO21 2JN, GB

Patent and Priority Information (Country, Number, Date):

Patent: WO 200072506 A1 20001130 (WO 0072506)

Application: WO 2000GB1940 20000522 (PCT/WO GB0001940)

Priority Application: US 99316805 19990521; US 99316804 19990521; US 99316686 19990521

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **H04L-009/32**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims



English Abstract

A method and system for efficiently establishing secure communications between mobile devices in a radio network. The present invention utilizes public key cryptography and unique hardware identifiers to enable authorizations for access to wireless networks, such as picocells. The present invention prevents the mobile user from maintaining a plurality of secrets such as user identifier/password pairs, PINs, or encryption keys, for access to each device to which he might require access. Wireless devices distributed throughout an enterprise are enabled to be efficiently initialized for secure communications. Well-known public key cryptography and machine unique identifiers are utilised to establish a secure channel and initialize the wireless devices. Wireless devices are enabled to be paired or permanently associated by a user or a network administrator. Well known public key cryptography and machine unique identifiers are utilised to establish a secure channel and associate the devices with each other. This is extremely useful for associating a wireless headset with a telephone or associating a wireless mouse with a computer.

French Abstract

La presente invention concerne un procede et un systeme permettant d'etablir efficacement des communications protegees entre des dispositifs mobiles d'un reseau radio. Cette invention utilise une cryptographie a cle publique et des identificateurs materiel uniques pour autoriser l'acces aux reseaux hertziens, tels que des picocellules. Cette invention permet a l'utilisateur de mobile de ne pas avoir a conserver une pluralite de codes secrets tels que les doublets mot de passe/identification utilisateur, codes PIN ou cle de cryptage, permettant d'accéder a chaque dispositif pour lesquels il doit demander un acces. On peut efficacement initialiser des dispositifs hertziens distribues dans une entreprise en vue de communications protegees. On utilise la cryptographie a cle publique bien connue et des identificateurs machine unique pour etablir un canal protege et initialiser les dispositifs hertziens. Ces dispositifs hertziens peuvent etre apparies ou associes de facon permanente par un utilisateur ou un administrateur de reseau. On utilise la cryptographie a cle publique bien connue et les identificateurs machine unique pour etablir un canal protege et associer les dispositifs entre eux. Ce procede est tres utile pour associer un casque radio et un telephone ou pour associer une souris sans fil et un ordinateur.

Legal Status (Type, Date, Text)

Publication 20001130 A1 With international search report.

Examination 20010215 Request for preliminary examination prior to end of 19th month from priority date

4/5/16 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015769147 \*\*Image available\*\*

WPI Acc No: 2003-831349/200377

XRPX Acc No: N03-664324

**Portal invocation control method e.g. for Yahoo portal, involves invoking group containing maximum number of portlets within set time mark and invoking other portlets in parallel with respect to maximum number of portlets**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: FISCHER P; HESMER S; KOEHLER D; SCHAECK T; STARK G; **TOPOL B B**

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20030188163 | A1   | 20031002 | US 2003351558 | A    | 20030123 | 200377 B |

Priority Applications (No Type Date): EP 20027110 A 20020328

Patent Details:

|                |      |     |    |             |              |
|----------------|------|-----|----|-------------|--------------|
| Patent No      | Kind | Lan | Pg | Main IPC    | Filing Notes |
| US 20030188163 | A1   |     | 14 | H04L-009/00 |              |

Abstract (Basic): US 20030188163 A1

NOVELTY - The portlet invocation request is received and the invocation time corresponding to the requested portlet is estimated. The time mark for rendering the requested display contents, is set. A group containing maximum number of portlets (80,90) are determined and invoked, without exceeding the set time mark. The other portlets are operated in parallel with respect to the portlets (80,90).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) adaptive control system;
- (2) portal; and
- (3) computer program product for invoking portlets.

USE - For invoking portal using portlets, e.g. Yahoo portal including applications such as e-mail, calendar, organizer, banking, bill presentment.

ADVANTAGE - Effective invoking of portlets in less invocation time is enabled. Hence rapid response is ensured.

DESCRIPTION OF DRAWING(S) - The figure shows the structural view of the adaptive control system.

local portlet (80)

remote portlet (90)

pp; 14 DwgNo 6/10

Title Terms: PORTAL; CONTROL; METHOD; PORTAL; INVOKE; GROUP; CONTAIN; MAXIMUM; NUMBER; SET; TIME; MARK; INVOKE; PARALLEL; RESPECT; MAXIMUM; NUMBER

Derwent Class: T01

International Patent Class (Main): H04L-009/00

International Patent Class (Additional): H04L-009/32

File Segment: EPI

4/5/17 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015704019 \*\*Image available\*\*

WPI Acc No: 2003-766212/200372

XPX Acc No: N03-613711

**Secure integrated device with secure, dynamically-selectable capabilities used in computer system, has security core that provides security functions and that can vouch for authenticity of each securely and operably connected component**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20030159044 | A1   | 20030821 | US 2001761906 | A    | 20010117 | 200372 B |

Priority Applications (No Type Date): US 2001761906 A 20010117

Patent Details:

|                |      |     |    |             |              |
|----------------|------|-----|----|-------------|--------------|
| Patent No      | Kind | Lan | Pg | Main IPC    | Filing Notes |
| US 20030159044 | A1   |     | 29 | H04L-009/00 |              |

Abstract (Basic): US 20030159044 A1

NOVELTY - The device has a security core operated to provide security functions, and operably connected components coupled to the security core. The security core can vouch for authenticity of each securely and operably connected component e.g. biometric sensor, smart card reader.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (a) Computer program product storing codes for operating security core and operably connecting components to security core;
- (b) Security integrated device system;
- (c) Manufacture of security integrated device; and
- (d) Improving security of transactions in portable devices using the security integrated device.

USE - Used in a computer system.

ADVANTAGE - Provides a technique whereby multiple functions can be conveniently and economically provided in a single personal device, while still ensuring the security of the device and the operations it performs. Provides a technique for providing secure pluggable application processors and input and output processors. Authenticates each plugged-in component before trusting the plugged-in component. Improves security of transactions carried out with personal devices. Reduces cost and complexity in computing and communicating using pervasive computers.

DESCRIPTION OF DRAWING(S) - The figure shows the aspect of the secure integrated device for improving security using smart cards.

pp; 29 DwgNo 4/9

Title Terms: SECURE; INTEGRATE; DEVICE; SECURE; DYNAMIC; SELECT; CAPABLE; COMPUTER; SYSTEM; SECURE; CORE; SECURE; FUNCTION; CAN; AUTHENTICITY; SECURE; OPERATE; CONNECT; COMPONENT

Derwent Class: S05; T01; T04; T05; W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

4/5/18 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015633334 \*\*Image available\*\*

WPI Acc No: 2003-695516/200366

XRPX Acc No: N03-555306

**Data policy enforcement computer program product, has program code unit for executing selected policy enforcement objects during application of style sheets to input document and policy for referencing object**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: HIND J R ; LINDQUIST D B; TOPOL B B ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6585778 | B1   | 20030701 | US 99385899 | A    | 19990830 | 200366 B |

Priority Applications (No Type Date): US 99385899 A 19990830

Patent Details:

| Patent No  | Kind | Lan Pg | Main IPC    | Filing Notes |
|------------|------|--------|-------------|--------------|
| US 6585778 | B1   | 16     | G06F-017/27 |              |

Abstract (Basic): US 6585778 B1

NOVELTY - The product has a program code for executing any one of instantiated policy enforcement objects during application of **style sheets** to an input document. The result of program code for executing an output document and the data policy for referencing objects that appear in the input document is reflected. The program code unit then instantiates policy enforcement objects associated with resolved references.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) a system for enforcing data policy
- (b) a method for enforcing data policy.

USE - Used for enforcing data policy.

ADVANTAGE - The data policy are efficiently enforced at an intermediate point in the delivery chain from a server application to a client in a complex networking environment. The data policy information may be different from one another and are specified by binding the data policy identifier to data objects in the document type definition (DTD)

to minimize policy related overhead during network transmission. The different data policies are applied to each different tagged item to provide maximum flexibility and no change is required in the **style sheet** that controls the transformation.

DESCRIPTION OF DRAWING(S) - The drawing shows a document type definition (DTD) that has been augmented with data policy information.

pp; 16 DwgNo 3/7

Title Terms: DATA; COMPUTER; PROGRAM; PRODUCT; PROGRAM; CODE; UNIT; EXECUTE ; SELECT; OBJECT; APPLY; STYLE; SHEET; INPUT; DOCUMENT; REFERENCE; OBJECT

Derwent Class: T01

International Patent Class (Main): G06F-017/27

File Segment: EPI

4/5/19 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015594532 \*\*Image available\*\*

WPI Acc No: 2003-656687/200362

XRPX Acc No: N03-523113

Style sheets location determining code, has sub process for applying style sheets subsets to client device and server or proxy, respectively based on determination as to which subset client device is capable of applying

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: BOAG S A; HIND J R ; TOPOL B B ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6589291 | B1   | 20030708 | US 99287989 | A    | 19990408 | 200362 B |

Priority Applications (No Type Date): US 99287989 A 19990408

Patent Details:

| Patent No  | Kind | Lan | Pg          | Main IPC | Filing Notes |
|------------|------|-----|-------------|----------|--------------|
| US 6589291 | B1   | 12  | G06F-015/00 |          |              |

Abstract (Basic): US 6589291 B1

NOVELTY - The code has a sub process for processing an input document. Another sub process determines two subsets of **style sheets** that a client device is capable and not capable of applying, respectively. The latter sub process then applies the former subset to the client device and the latter to a server or a proxy.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a system for dynamically determining the most appropriate location for applying **style sheets** in a computing environment

(b) a method for dynamically determining the most appropriate location for applying **style sheets** in a computing environment.

USE - Used for determining the location for applying **style sheets**.

ADVANTAGE - The code dynamically determines the most appropriate location for applying the **style sheets** and increases the applicability of the **style sheets** when a **style sheet** tailored to a particular target environment is not readily available.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow chart describing the logic involved in determining the most appropriate location for applying **style sheets** in a computing environment.

pp; 12 DwgNo 3/3

Title Terms: STYLE; SHEET; LOCATE; DETERMINE; CODE; SUB; PROCESS; APPLY;

STYLE; SHEET; SUBSET; CLIENT; DEVICE; SERVE; RESPECTIVE; BASED; DETERMINE

; SUBSET; CLIENT; DEVICE; CAPABLE; APPLY.

Derwent Class: T01

International Patent Class (Main): G06F-015/00

File Segment: EPI

4/5/20 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015293013 \*\*Image available\*\*  
WPI Acc No: 2003-353947/200333  
XRPX Acc No: N03-282820

**Spoofed source internet protocol address determination method for network communication, involves judging spoofing of source IP address, when source IP address does not correspond to source media access control address**

Patent Assignee: DOYLE R P (DOYL-I); HIND J R (HIND-I); NARTEN T (NART-I);  
PETERS M L (PETE-I)

Inventor: DOYLE R P; HIND J R; NARTEN T; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20030043853 | A1   | 20030306 | US 2001930351 | A    | 20010815 | 200333 B |

Priority Applications (No Type Date): US 2001930351 A 20010815

Patent Details:

| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
|----------------|------|--------|-------------|--------------|
| US 20030043853 | A1   | 23     | H04L-012/56 |              |

Abstract (Basic): US 20030043853 A1

NOVELTY - A source media access control (MAC) address of the packet and the source IP address are evaluated to determine, if the source IP address corresponds to source MAC address. The source IP address of the packet is judged to be spoofed, when the source IP address does not correspond to the source MAC address.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) method of doing business;
- (2) system for determining packet; and
- (3) computer program product for spoofed source internet protocol address determination.

USE - For network communication using Internet protocol (IP).

ADVANTAGE - Enables reducing network degradation as result of denial of provision of service utilizing spoofed source IP addresses. Increases availability of the network attached storage device in the event of denial of provision of service.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the spoofed source internet protocol address determination.

pp; 23 DwgNo 2/11

Title Terms: SOURCE; PROTOCOL; ADDRESS; DETERMINE; METHOD; NETWORK;  
COMMUNICATE; JUDGEMENT; SOURCE; IP; ADDRESS; SOURCE; IP; ADDRESS;  
CORRESPOND; SOURCE; MEDIUM; ACCESS; CONTROL; ADDRESS

Derwent Class: T01; W01

International Patent Class (Main): H04L-012/56

File Segment: EPI

4/5/21 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015280542 \*\*Image available\*\*  
WPI Acc No: 2003-341473/200332  
XRPX Acc No: N03-273151

**Three-party connection providing method in voice-over-internet-protocol telephone call, involves mixing VoIP information from ports of two call participants and transferring to another call participant**

Patent Assignee: ROCKWELL FIRSTPOINT CONTACT CORP (ROCW ); PETERS M  
(PETE-I)

Inventor: PETERS M

Number of Countries: 003 Number of Patents: 003

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20030012148 | A1   | 20030116 | US 2001902205 | A    | 20010710 | 200332 B |
| GB 2379128     | A    | 20030226 | GB 200216024  | A    | 20020710 | 200332   |
| DE 10231191    | A1   | 20030220 | DE 1031191    | A    | 20020710 | 200332   |

Priority Applications (No Type Date): US 2001902205 A 20010710

Patent Details:

| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
|----------------|------|--------|-------------|--------------|
| US 20030012148 | A1   | 7      | H04L-012/16 |              |
| GB 2379128     | A    |        | H04M-003/56 |              |
| DE 10231191    | A1   |        | H04M-003/56 |              |

Abstract (Basic): US 20030012148 A1

NOVELTY - Two ports are provided within a transceiving terminal for receiving voice-over-internet-protocol (VoIP) voice information from two call participants, respectively. The VoIP information from the ports of the two call participants are mixed and transferred to another call participant.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for three-party connection providing apparatus.

USE - For providing three-party connection in voice-over-internet-protocol (VoIP) telephone call.

ADVANTAGE - Enables third party to participate in VoIP multipoint conference call.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of system providing software based single agent multipoint conference capability.

pp; 7 DwgNo 1/4

Title Terms: THREE; PARTY; CONNECT; METHOD; VOICE; PROTOCOL; TELEPHONE; CALL; MIX; INFORMATION; PORT; TWO; CALL; PARTICIPATING; TRANSFER; CALL; PARTICIPATING

Derwent Class: T01; W01

International Patent Class (Main): H04L-012/16 ; H04M-003/56

International Patent Class (Additional): H04L-012/18 ; H04L-012/66 ; H04M-007/00; H04M-011/08

File Segment: EPI

4/5/22 (Item 7 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derweht. All rts. reserv.

015268546 \*\*Image available\*\*

WPI Acc No: 2003-329475/200331

XRPX Acc No: N03-263610

**Data writing method is SDRAM for computer system, involves providing spares byte enable information and initiating read sequence of old data from memory**

Patent Assignee: KLOB CAR J R (KLOB-I); PETERS M J (PETE-I)

Inventor: KLOB CAR J R; PETERS M J

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20030002466 | A1   | 20030102 | US 2001884270 | A    | 20010619 | 200331 B |

Priority Applications (No Type Date): US 2001884270 A 20010619

Patent Details:

| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
|----------------|------|--------|-------------|--------------|
| US 20030002466 | A1   | 10     | H04Q-007/24 |              |

Abstract (Basic): US 20030002466 A1

NOVELTY - The sparse byte enable information indicating an initial block of data less than complete data word, is provided to a memory interface (144). The read sequence of old data from the memory (160) is initiated in response to the indication.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) computer memory control method; and
- (2) computer memory controller.

USE - For writing data in memory e.g. SDRAM, DRAM, RAM, SRAM, etc., for computer system.

ADVANTAGE - Reduces/eliminates the latency that is encountered if the memory interface is not aware of the spare byte enable condition until the first block of data arrived at the memory interface, thereby improving the efficiency and speed of the memory controller.

DESCRIPTION OF DRAWING(S) - The figure shows a functional block diagram of the memory controller.

memory interface (144)

memory (160)

pp; 10 DwgNo 1/3

Title Terms: DATA; WRITING; METHOD; COMPUTER; SYSTEM; SPARE; BYTE; ENABLE;

INFORMATION; INITIATE; READ; SEQUENCE; DATA; MEMORY

Derwent Class: U13; U14

International Patent Class (Main): H04Q-007/24

International Patent Class (Additional): H04L-012/66

File Segment: EPI

4/5/23 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015125344 \*\*Image available\*\*

WPI Acc No: 2003-185868/200319

SRPX Acc No: N03-146422

**Configuration for combining two video digital time-aligned data streams uses first and second delaying elements to delay a data stream and a synchronized signal and read/write pointers to read/write data to memory.**

Patent Assignee: PHILIPS CORP INTELLECTUAL PROPERTY GMBH (PHIG ); KONINK PHILIPS ELECTRONICS NV (PHIG ); PHILIPS GLOEILAMPENFAB NV (PHIG ); PETERS M (PETE-I)

Inventor: PETERS M ; PETERS M P C

Number of Countries: 028 Number of Patents: 004

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| EP 1259065     | A2   | 20021120 | EP 2002100485 | A    | 20020514 | 200319 B |
| US 20020181638 | A1   | 20021205 | US 2002144432 | A    | 20020513 | 200319   |
| DE 10123786    | A1   | 20021121 | DE 1023786    | A    | 20010516 | 200319   |
| JP 2003023606  | A    | 20030124 | JP 2002136775 | A    | 20020513 | 200319   |

Priority Applications (No Type Date): DE 1023786 A 20010516

Patent Details:

| Patent No | Kind | Lan Pg | Main IPC | Filing Notes |
|-----------|------|--------|----------|--------------|
|-----------|------|--------|----------|--------------|

|            |    |   |                |  |
|------------|----|---|----------------|--|
| EP 1259065 | A2 | G | 6 H04N-005/067 |  |
|------------|----|---|----------------|--|

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

|                |    |             |
|----------------|----|-------------|
| US 20020181638 | A1 | H04L-007/00 |
|----------------|----|-------------|

|             |    |             |
|-------------|----|-------------|
| DE 10123786 | A1 | G06F-005/06 |
|-------------|----|-------------|

|               |   |               |
|---------------|---|---------------|
| JP 2003023606 | A | 6 H04N-005/92 |
|---------------|---|---------------|

Abstract (Basic): EP 1259065 A2

NOVELTY - A first delaying element (2) delays a first data stream (V1) by a first preset period. A second delaying element (3) delays a synchronized signal (S) for the first data stream by a second preset period. A second data stream (V2) is written to a memory (4) in accordance with a write pointer (WP) and read from it in accordance with a read pointer. (RP).

DETAILED DESCRIPTION - Each pulse of an undelayed synchronized signal (WPR) for the first data stream resets the write pointer. Each pulse of the synchronized signal for the first data stream delayed by the second delaying element resets the read pointer.

USE - For reducing noise in video data. For creating an image-on-image function.

ADVANTAGE - The first period is selected so that output data

streams for the first delaying element and for the memory appear on devices (6) for combining/processing in a required time relationship with each other. The second period is selected so that during the reading-from-memory process the reader pointer does not catch up with the write pointer even in respect of any discontinuities occurring in the second data stream.

DESCRIPTION OF DRAWING(S) - The drawing shows a block circuit diagram of a configuration for combining first and second video data streams.

First delaying element (2)  
First data stream (V1)  
Second delaying element (3)  
Synchronized signal (S)  
Second data stream (V2)  
Memory (4)  
Write pointer (WP)  
Read pointer (RP)  
Undelayed synchronized signal (WPR)  
Devices for combining/processing in a required time relationship with each other (6)  
pp; 6 DwgNo 1/1

Title Terms: CONFIGURATION; COMBINATION; TWO; VIDEO; DIGITAL; TIME; ALIGN; DATA; STREAM; FIRST; SECOND; DELAY; ELEMENT; DELAY; DATA; STREAM; SYNCHRONISATION; SIGNAL; READ; WRITING; POINT; READ; WRITING; DATA; MEMORY

Derwent Class: T01; W04

International Patent Class (Main): G06F-005/06; **H04L-007/00** ; H04N-005/067 ; H04N-005/92

International Patent Class (Additional): H04J-003/06; H04J-003/08; **H04L-025/00** ; H04N-005/265; H04N-005/45; H04N-005/93

File Segment: EPI

**4/5/24 (Item 9 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015028956 \*\*Image available\*\*

WPI Acc No: 2003-089473/200308

XRAM Acc No: C03-022617

XRPX Acc No: N03-070513

**Computer readable code for retrieving style sheets in computer system, stores extracted style sheet characteristics in repository along with identifier of selected style sheet**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: **HIND J R** ; LECTION D B; TIDWELL L D; **TOPOL B B** ; WESLEY A A

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6463440 | B1   | 20021008 | US 99287988 | A    | 19990408 | 200308 B |

Priority Applications (No Type Date): US 99287988 A 19990408

Patent Details:

| Patent No  | Kind | Lan Pg | Main IPC    | Filing Notes |
|------------|------|--------|-------------|--------------|
| US 6463440 | B1   | 15     | G06F-017/30 |              |

Abstract (Basic): US 6463440 B1

NOVELTY - One or more characteristics are associated with each **style sheet**. The associated characteristics are refracted for selected **style sheets**. The extracted characteristics are stored in a repository along with an identifier of the selected **style sheet**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) **Style sheet** retrieving system; and
- (2) **Style sheet** retrieving method.

USE - Computer readable core for retrieving **style sheets** for use in computer system.



ADVANTAGE - Enables to select and retrieve appropriate **style sheets** with high efficiency.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the **style sheet** retrieving method.

pp; 15 DwgNo 5/5

Title Terms: COMPUTER; READ; CODE; RETRIEVAL; STYLE; SHEET; COMPUTER; SYSTEM; STORAGE; EXTRACT; STYLE; SHEET; CHARACTERISTIC; REPOSITORY; IDENTIFY; SELECT; STYLE; SHEET

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

4/5/25 (Item 10 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014893221 \*\*Image available\*\*

WPI Acc No: 2002-713927/200277

XRPX Acc No: N02-563231

**Account-based transactions e.g. e-commerce transactions over internet using secure personal authorization criteria to prevent fraudulent use of account holder information**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM UK LTD (IBMC )

Inventor: **PETERS M E**

Number of Countries: 100 Number of Patents: 002

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| WO 200282392   | A2   | 20021017 | WO 2002GB1029 | A    | 20020307 | 200277 B |
| US 20020161724 | A1   | 20021031 | US 2001827075 | A    | 20010405 | 200279   |

Priority Applications (No Type Date): US 2001827075 A 20010405

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200282392 A2 E 21 G07F-019/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020161724 A1 H04K-001/00

Abstract (Basic): WO 200282392 A2

NOVELTY - An account holder adds merchant-specific personal authorization criteria to the account record. Criteria is also established to control dealings with merchants for whom no explicit criteria exist.

USE - For securing electronic transactions e.g. e-commerce transactions over the internet between account holders, e.g. credit or debit card holders and a merchant.

ADVANTAGE - Improves the confidence of account holders that no misuse of information supplied to a merchant during transactions will occur.

DESCRIPTION OF DRAWING(S) - The drawing shows a schematic diagram of the system required to implement the method.

pp; 21 DwgNo 3/8

Title Terms: ACCOUNT; BASED; TRANSACTION; TRANSACTION; SECURE; PERSON; AUTHORISE; CRITERIA; PREVENT; FRAUD; ACCOUNT; HOLD; INFORMATION

Derwent Class: T01; T05

International Patent Class (Main): G07F-019/00; H04K-001/00

International Patent Class (Additional): G06F-017/60; H04L-009/00

File Segment: EPI

4/5/26 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014876883 \*\*Image available\*\*  
WPI Acc No: 2002-697589/200275  
XRPX Acc No: N02-550053

**Evidence provision system for pervasive device e.g. cellular phone,  
provides evidence collection contained in recorded data streams created  
by selected application processor**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: **HIND J R ; PETERS M L**

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| US 20020095601 | A1   | 20020718 | US 2001761899 | A    | 20010117 | 200275 B |

Priority Applications (No Type Date): US 2001761899 A 20010117.

Patent Details:

| Patent No      | Kind | Lan Pg | Main IPC    | Filing Notes |
|----------------|------|--------|-------------|--------------|
| US 20020095601 | A1   | 30     | H04L-009/00 |              |

Abstract (Basic): US 20020095601 A1

NOVELTY - An authentication unit authenticates each application processor connected to a security core. A recording module records the data streams created by the selected processor. An evidence provision unit provides the evidence collection contained in the recorded data streams.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Evidence creation method; and
- (2) Computer program product storing evidence provision program.

USE - For pervasive devices such as pagers, cellular phones, foreign language translation devices, electronic address book device, wearable computing devices, vehicle-mounted devices e.g. on-board navigation system, computing devices adapted to use in the home such as intelligent sensor built into kitchen appliance, mobile computers, personal digital assistant (PDA), handheld computer, etc.

ADVANTAGE - Provides a provable chain of evidence for data streams created by devices connected to a processor. Provides improved security to data streams transmitted. Verifies the authenticity and the integrity of the evidence collection. Provides greater security, reduces weight, power consumption, implementation complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the establishment of provable chain of evidence.

pp; 30 DwgNo 8/9

Title Terms: EVIDENCE; PROVISION; SYSTEM; DEVICE; CELLULAR; TELEPHONE;  
EVIDENCE; COLLECT; CONTAIN; RECORD; DATA; STREAM; SELECT; APPLY;  
PROCESSOR

Derwent Class: T01; W01

International Patent Class (Main): **H04L-009/00**

File Segment: EPI

**4/5/27 (Item 12 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014835353 \*\*Image available\*\*  
WPI Acc No: 2002-656059/200270  
XRPX Acc No: N02-518521

**Biometric input provision system for cellular phones has security core  
connected to biometric sensor and card reader through I/O bus**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; **HIND J R ; PETERS M L**

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|-----------|------|------|-------------|------|------|------|
|-----------|------|------|-------------|------|------|------|

US 20020095587 A1 20020718 US 2001764844 A 20010117 200270 B

Priority Applications (No Type Date): US 2001764844 A 20010117

Patent Details:

|                |      |     |    |             |     |        |       |
|----------------|------|-----|----|-------------|-----|--------|-------|
| Patent No      | Kind | Lan | Pg | Main        | IPC | Filing | Notes |
| US 20020095587 | A1   |     | 26 | H04L-009/00 |     |        |       |

Abstract (Basic): US 20020095587 A1

NOVELTY - A security core (150) provides security functions, for authentication of I/O components. A card reader (610) accesses secrets and identification information of an authorized card holder stored in a card (510). A biometric sensor (520), the card reader and the security core are connected securely.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Biometric input provision method;
- (2) Card; and
- (3) Computer program product.

USE - For pagers, cellular phones, foreign language translation device, electronic address book device, portable computer, on-board navigation system, intelligent sensor in kitchen appliance, personal digital assistant and handheld computers.

ADVANTAGE - Improves security of transactions carried out between personal devices, as the input/output component is plugged to the security core securely. Reduces weight, power consumption, complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the biometric input provision system.

Security core (150)  
Card (510)  
Biometric sensor (520)  
Card reader (610)  
pp; 26 DwgNo 6/9

Title Terms: INPUT; PROVISION; SYSTEM; CELLULAR; TELEPHONE; SECURE; CORE;  
CONNECT; SENSE; CARD; READ; THROUGH; BUS  
Derwent Class: S05; T01; T04; T05; W01  
International Patent Class (Main): H04L-009/00  
File Segment: EPI

4/5/28 (Item 13 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014815394 \*\*Image available\*\*

WPI Acc No: 2002-636100/200268

XRPX Acc No: N02-502593

**Continuous authentication providing system for user of computing device**

**for e.g. pager, PDA, has comparator to compare repeated obtained**

**biometric input of user to securely stored biometric information of owner**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

|                |      |          |               |      |          |          |
|----------------|------|----------|---------------|------|----------|----------|
| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
| US 20020095586 | A1   | 20020718 | US 2001764827 | A    | 20010117 | 200268 B |

Priority Applications (No Type Date): US 2001764827 A 20010117

Patent Details:

|                |      |     |    |             |     |        |       |
|----------------|------|-----|----|-------------|-----|--------|-------|
| Patent No      | Kind | Lan | Pg | Main        | IPC | Filing | Notes |
| US 20020095586 | A1   |     | 28 | H04L-009/32 |     |        |       |

Abstract (Basic): US 20020095586 A1

NOVELTY - A security component having security function, vouches for authenticity of component such as biometric sensors, input/output units, application processors, which are securely operably connected to it. A comparator compares the repeatedly obtained biometric input of

the user of the computing device to the securely stored biometric information of the owner, to authenticate the user.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Continuous authentication provision method; and
- (2) Computer program product for providing continuous authentication of user.

USE - For continuously authenticating user of pervasive computing device such as portable or personal computing devices, pager, cellular phones, foreign language translation devices, electronic address book devices, wearable computing devices, devices mounted in a vehicle such as on-board navigation system, kitchen appliances, mobile computers, PDAs, handheld computer.

ADVANTAGE - Improves security of the computing devices and the operation performed by it while reducing weight, footprint, power consumption, implementation complexity and cost.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of the continuous authentication providing process.

pp; 28 DwgNo 7/9

Title Terms: CONTINUOUS; AUTHENTICITY; SYSTEM; USER; COMPUTATION; DEVICE; PAGE; COMPARATOR; COMPARE; REPEAT; OBTAIN; INPUT; USER; SECURE; STORAGE; INFORMATION; OWNER

Derwent Class: S05; T01; T04; W01

International Patent Class (Main): H04L-009/32

File Segment: EPI

4/5/29 (Item 14 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014660785 \*\*Image available\*\*

WPI Acc No: 2002-481489/200252

XRPX Acc No: N02-380347

**Packet switched mode call routing method in multimedia telecommunication network, involves storing application level location information to route packet switched mode call, upon receiving alerting message**

Patent Assignee: ALCATEL (COGE)

Inventor: BOS L M M R; PETERS M J H

Number of Countries: 028 Number of Patents: 003

Patent Family:

| Patent No      | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|----------------|------|----------|---------------|------|----------|----------|
| EP 1206145     | A1   | 20020515 | EP 2000403157 | A    | 20001113 | 200252 B |
| US 20020057668 | A1   | 20020516 | US 2001986697 | A    | 20011109 | 200252   |
| CN 1379604     | A    | 20021113 | CN 2001145792 | A    | 20011113 | 200317   |

Priority Applications (No Type Date): EP 2000403157 A 20001113

Patent Details:

| Patent No | Kind | Lang | Pg | Main IPC | Filing Notes |
|-----------|------|------|----|----------|--------------|
|-----------|------|------|----|----------|--------------|

|            |    |   |    |             |  |
|------------|----|---|----|-------------|--|
| EP 1206145 | A1 | E | 12 | H04Q-007/22 |  |
|------------|----|---|----|-------------|--|

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

|                |    |  |  |             |  |
|----------------|----|--|--|-------------|--|
| US 20020057668 | A1 |  |  | H04J-003/24 |  |
|----------------|----|--|--|-------------|--|

|            |   |  |  |             |  |
|------------|---|--|--|-------------|--|
| CN 1379604 | A |  |  | H04Q-007/22 |  |
|------------|---|--|--|-------------|--|

Abstract (Basic): EP 1206145 A1

NOVELTY - An alerting message (ALT) is sent to a user (B) who has not registered for call control on an application level, to alert the terminal (T2) of the user about an incoming packet switched mode call (PS). Upon reception of the alerting message, the application level location information (SIP-LOC-B) is stored in the application level location register (HPD) of the telecommunication network to route the packet switched mode call to the terminal.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) CSM multimedia telecommunication network;
- (2) Multimedia telecommunication terminal; and

(a) a network for use in a telecommunication system;  
(b) a terminal for use in a telecommunication system;  
(c) a signal generator for use in a telecommunication system;  
(d) and a method for use in a telecommunication system for  
receiving at least one control signal from a user via a terminal.  
USE - Telecommunication system.

ADVANTAGE - Provides telecommunication system which is more  
user-friendly.

DESCRIPTION OF DRAWING(S) - The figure illustrates the  
telecommunication system.

Internet terminal (1,2,6,7)

pp; 16 DwgNo 1/1

Title Terms: TELECOMMUNICATION; SYSTEM; SIGNAL; GENERATOR; PRODUCE; ONE;

ADDRESS; SIGNAL; RESPOND; ONE; CONTROL; SIGNAL; USER; DEPEND; WAY

Derwent Class: T01; W01

International Patent Class (Main): H04L-029/12

International Patent Class (Additional): G06F-017/30; H04L-029/06

File Segment: EPI

4/5/32 (Item 17 from file: 350)

DIALOG(R) File 350; Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014144158 \*\*Image available\*\*

WPI Acc No: 2001-628369/200173

XRPX Acc No: N01-468631

Communication device authentication system in client-server network,  
processes message from one device only if the device is determined to be  
authentic, based on which receiving device transmits response message

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: HIND J R ; PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No  | Kind | Date     | Week     |
|------------|------|----------|--------------|------|----------|----------|
| GB 2359969 | A    | 20010905 | GB 200026181 | A    | 20001026 | 200173 B |

Priority Applications (No Type Date): US 99435417 A 19991108

Patent Details:

| Patent No  | Kind | Lan Pg | Main IPC    | Filing Notes |
|------------|------|--------|-------------|--------------|
| GB 2359969 | A    | 59     | H04L-009/32 |              |

Abstract (Basic): GB 2359969 A

NOVELTY - A device certificate identifies a device using an  
identifier associated with a network adaptor card of the device. The  
created public and private keys are stored in the device certificate  
and the device, respectively. A message from the transmitting device is  
processed if the device is determined as authentic, based on which a  
receiving device generates and transmits response message.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for  
device certificates using method.

USE - E.g. computer such as laptops, portable computers,  
vehicle-mounted devices, desktop computers, main frame computers etc.,  
in client-server network.

ADVANTAGE - A device is uniquely identified by a device identifier  
stored in a digital certificate. Since a pair of public and private  
keys are provided for the device, misuse of the device is prevented  
easily.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
computer workstation.

pp; 59 DwgNo 1A/6

Title Terms: COMMUNICATION; DEVICE; AUTHENTICITY; SYSTEM; CLIENT; SERVE;

NETWORK; PROCESS; MESSAGE; ONE; DEVICE; DEVICE; DETERMINE; AUTHENTICITY;

BASED; RECEIVE; DEVICE; TRANSMIT; RESPOND; MESSAGE

Derwent Class: T01; W01

International Patent Class (Main): H04L-009/32

International Patent Class (Additional): G06F-001/00; H04L-029/06

Title Terms: TERMINAL; SERVE; TRANSLATION; APPLY; SIGNAL; PREDEFINED; APPLY  
; OPEN; SIGNAL; VICE-VERSA; OPEN; SIGNAL; INDEPENDENT; UNDERLYING;  
TECHNOLOGY; TERMINAL; CAPABLE; UNIT  
Derwent Class: W01  
International Patent Class (Main): G06F-009/44; H04B-001/38; H04M-001/725;  
H04Q-007/20; H04Q-007/32; H04Q-007/36  
International Patent Class (Additional): H04B-007/26; **H04L-012/16** ;  
H04M-001/00; H04M-001/247; H04Q-007/38  
File Segment: EPI

4/5/34 (Item 19 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013999788 \*\*Image available\*\*  
WPI Acc No: 2001-484002/200153  
XRPX Acc No: N01-358222

**Selective data encoding by application of style - sheet processing for document elements in computer environment, involves carrying out selected support objects on given input document during use of one or more style - sheets**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: DAVIS M C; **HIND J R** ; **PETERS M L** ; **TOPOL B B**  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week     |
|-------------|------|----------|-------------|------|----------|----------|
| DE 10051571 | A1   | 20010426 | DE 1051571  | A    | 20001018 | 200153 B |

Priority Applications (No Type Date): US 99422430 A 19991021

Patent Details:

| Patent No   | Kind | Lan Pg | Main IPC    | Filing Notes |
|-------------|------|--------|-------------|--------------|
| DE 10051571 | A1   | 6      | H04L-009/00 |              |

Abstract (Basic): DE 10051571 A1

NOVELTY - Documents are subject to selective encoding for protecting the information against unintentional publication, and include XML-documents and XSL-processors, and following preparation of an input-document, one or several support objects are prepared, and then a document-type definition (DTD) corresponding to the given input document. Selected prescribed support objects are carried out during use of one or more **style - sheets** on the given input document, resulting in an interim document. One or several randomly generated encoding keys are then generated, and the selected elements of the interim documents are encoded, to prepared producing an encoded output document with zero or more unencoded elements. The find (result) documents is produced on a given client device, with encoding of the given received documents for a discrete user or process on the stated client device.

USE - Computer system, and especially on computer program for selective encoding of one or more document elements by the use of **style sheet** processing.

ADVANTAGE - Provides efficient support of the safety measures in complex distributed networks. Enables data to be protected during the entire business process and during the transmission between agents in a network path from a document server to a document receiver.

DESCRIPTION OF DRAWING(S) - A block diagram of a computer work station environment in which the proposal can be carried out is given.

Single user computer workstation (10)

Microprocessor (12)

Bus (14)

User interface-adapter (16)

Keyboard (18)

Mouse (20)

Interface devices (22)

Display device (24)

Display adapter (26)

Memory (28)  
Long-term store (30)  
pp; 6 DwgNo 1/2  
Title Terms: SELECT; DATA; ENCODE; APPLY; STYLE; SHEET; PROCESS; DOCUMENT;  
ELEMENT; COMPUTER; ENVIRONMENT; CARRY; SELECT; SUPPORT; OBJECT; INPUT;  
DOCUMENT; ONE; MORE; STYLE; SHEET  
Derwent Class: T01; W01  
International Patent Class (Main): H04L-009/00  
International Patent Class (Additional): G06F-012/14  
File Segment: EPI

4/5/35 (Item 20 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013762661 \*\*Image available\*\*  
WPI Acc No: 2001-246872/200126  
XRPX Acc No: N01-175844

**Mobile telecommunications terminal for use in a mobile network such as  
Global System for Mobile communication, includes additional decoders to  
improve reception capability**

Patent Assignee: ALCATEL (COGE ); ALCATEL ALSTHOM CIE GEN ELECTRICITE  
(COGE )

Inventor: BERNARD G G D G; PETERS M J H  
Number of Countries: 028 Number of Patents: 004

Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|---------------|------|----------|---------------|------|----------|----------|
| EP 1083762    | A1   | 20010314 | EP 99402220   | A    | 19990909 | 200126 B |
| AU 200045153  | A    | 20010315 | AU 200045153  | A    | 20000710 | 200126   |
| HU 200002955  | A2   | 20010328 | HU 20002955   | A    | 20000727 | 200126   |
| JP 2001127697 | A    | 20010511 | JP 2000260275 | A    | 20000830 | 200133   |

Priority Applications (No Type Date): EP 99402220 A 19990909

Patent Details:

| Patent No                                                                                                   | Kind | Lan | Pg | Main IPC    | Filing Notes |
|-------------------------------------------------------------------------------------------------------------|------|-----|----|-------------|--------------|
| EP 1083762                                                                                                  | A1   | E   | 8  | H04Q-007/30 |              |
| Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT<br>LI LT LU LV MC MK NL PT RO SE SI |      |     |    |             |              |
| AU 200045153                                                                                                | A    |     |    | H04Q-007/32 |              |
| HU 200002955                                                                                                | A2   |     |    | H04Q-007/32 |              |
| JP 2001127697                                                                                               | A    |     | 18 | H04B-007/26 |              |

Abstract (Basic): EP 1083762 A1

NOVELTY - Mobile telecommunication terminal (TA) includes codec (CA) for communication using a first predefined code type. It also includes a second decoder (DB) which operates according to a second predefined code type, but does not include an associated encoder. This second encoder can be temporarily stored in a memory of the handset and may be downloaded, e.g. from the Internet.

USE - For use in mobile telecommunications systems such as Global System for Mobile communication and Universal Mobile Telecommunication Standard networks.

ADVANTAGE - The second decoder is software that may be downloaded from the Internet, which enables the handset to be adapted to receive from a terminal of a different type or to be updated to the latest version of a particular type. This flexibility optimizes communication reception and is even applicable in the case of transcoding free operation not being enabled, moreover cost is also reduced since decoders are generally available to be downloaded free whilst encoders are relatively expensive to purchase.

DESCRIPTION OF DRAWING(S) - The figure represents a mobile telecommunication terminal used in a telecommunication network.

Codec ((DB) Decoder ((TA) Mobile telecommunication terminal. (CA)  
pp; 8 DwgNo 1/1

Title Terms: MOBILE; TELECOMMUNICATION; TERMINAL; MOBILE; NETWORK; GLOBE;  
SYSTEM; MOBILE; COMMUNICATE; ADD; DECODE; IMPROVE; RECEPTION; CAPABLE

Derwent Class: U21; U25; W01

International Patent Class (Main): H04B-007/26; H04Q-007/30; H04Q-007/32

International Patent Class (Additional): H04L-029/06 ; H04Q-007/38

File Segment: EPI

4/5/36 (Item 21 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013653409 \*\*Image available\*\*

WPI Acc No: 2001-137621/200114

CRPX Acc No: N01-100283

**Secure communication initialization method for communication of mobile devices involves setting key agreement between mobile devices to set secure communication based on verification of challenge signature**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM UK LTD (IBMC )

Inventor: HIND J R ; PETERS M L

Number of Countries: 094 Number of Patents: 011

Patent Family:

| Patent No     | Kind | Date     | Applicat No   | Kind | Date     | Week     |
|---------------|------|----------|---------------|------|----------|----------|
| WO 200072506  | A1   | 20001130 | WO 2000GB1940 | A    | 20000522 | 200114 B |
| AU 200050845  | A    | 20001212 | AU 200050845  | A    | 20000522 | 200115   |
| EP 1179244    | A1   | 20020213 | EP 2000935289 | A    | 20000522 | 200219   |
|               |      |          | WO 2000GB1940 | A    | 20000522 |          |
| KR 2001114272 | A    | 20011231 | KR 2001714798 | A    | 20011120 | 200240   |
| CZ 200104168  | A3   | 20020515 | WO 2000GB1940 | A    | 20000522 | 200241   |
|               |      |          | CZ 20014168   | A    | 20000522 |          |
| CN 1351789    | A    | 20020529 | CN 2000807652 | A    | 20000522 | 200258   |
| HU 200201561  | A2   | 20020930 | WO 2000GB1940 | A    | 20000522 | 200272   |
|               |      |          | HU 20021561   | A    | 20000522 |          |
| TW 478269     | A    | 20020301 | TW 2000109589 | A    | 20000518 | 200305   |
| TW 480864     | A    | 20020321 | TW 2000109590 | A    | 20000518 | 200308   |
| JP 2003500923 | W    | 20030107 | JP 2000619855 | A    | 20000522 | 200314   |
|               |      |          | WO 2000GB1940 | A    | 20000522 |          |
| TW 498669     | A    | 20020811 | TW 2000109588 | A    | 20000518 | 200331   |

Priority Applications (No Type Date): US 99316805 A 19990521; US 99316686 A 19990521; US 99316804 A 19990521

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200072506 A1 E 43 H04L-009/32

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200050845 A H04L-009/32 Based on patent WO 200072506

EP 1179244 A1 E H04L-009/32 Based on patent WO 200072506

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

KR 2001114272 A H04L-009/32

CZ 200104168 A3 H04L-009/32 Based on patent WO 200072506

CN 1351789 A H04L-009/32

HU 200201561 A2 H04L-009/32 Based on patent WO 200072506

TW 478269 A H04L-009/32

TW 480864 A H04L-009/32

JP 2003500923 W 53 H04L-009/32 Based on patent WO 200072506

TW 498669 A H04L-009/32

Abstract (Basic): WO 200072506 A1

NOVELTY - The signing of the received challenge is performed in mobile devices (2001,2003) in response to the challenge exchange using a private key to the respective protected storage in each mobile device. A key agreement between the mobile devices is set to establish a secure communication based on the success of the cryptographic



verification of the received challenge signature within the sent challenge.

DETAILED DESCRIPTION - The method involves establishing a session between mobile devices in a radio network. A two-way session encryption and the mutual authentication requirements are negotiated between the mobile devices. The device certificates of the mobile devices are exchanged. The received certificate is cryptographically verified using the public key of a certificate authority. The exchange of the challenges created by the mobile devices, is performed. INDEPENDENT CLAIMS are also included for the following:

(a) a computer program for initializing secure communication between mobile devices;

(b) and a secure communication initialization system.

USE - For establishing communication between mobile devices in radio network.

ADVANTAGE - Enables initializing secure communication between mobile devices without requiring manual entry of user's identifiers, passwords or cryptographic keys, hence reducing security exposures associated with manual entry. Enables efficient administration of secure devices within an enterprise without creating additional administrative overhead for initializing the devices.

DESCRIPTION OF DRAWING(S) - The figure shows the authentication flow diagram for secure communication initialization method.

Mobile devices (2001,2003)

pp; 43 DwgNo 4/9

Title Terms: SECURE; COMMUNICATE; INITIALISE; METHOD; COMMUNICATE; MOBILE; DEVICE; SET; KEY; AGREE; MOBILE; DEVICE; SET; SECURE; COMMUNICATE; BASED; VERIFICATION; SIGNATURE

Derwent Class: T01; W01; W02

International Patent Class (Main): H04L-009/32

International Patent Class (Additional): G06F-015/00; H04L-009/08

File Segment: EPI

4/5/37 (Item 22 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013500134 \*\*Image available\*\*

WPI Acc No: 2000-672075/200065

XRPX Acc No: N00-498229

**Computer program for certificate based authentication for system network architecture communication, has module to create packet comprising token, signature and certificate chain to verify user authentication**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DOYLE R P; HIND J R ; KING J H

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6128738 | A    | 20001003 | US 9864632  | A    | 19980422 | 200065 B |

Priority Applications (No Type Date): US 9864632 A 19980422

Patent Details:

| Patent No  | Kind | Lan Pg | Main IPC    | Filing Notes |
|------------|------|--------|-------------|--------------|
| US 6128738 | A    | 12     | H04L-009/00 |              |

Abstract (Basic): US 6128738 A

NOVELTY - The computer program includes a module to identify token, token signature and certificate chain of computer user and to create a communication packet. The communication packet is transmitted to the computer systems accessible by user. User authorization to access data at computer systems is performed using received communication packet.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) certificate based authentication apparatus;

(b) method for controlling access

USE - For certificate based authentication in system network

architecture (SNA) communication.

ADVANTAGE - Enables use of single client certificate for multiple applications. Eliminates the need for a trusted third party or multiple user ID and password pairs.

DESCRIPTION OF DRAWING(S) - The figure shows the explanatory drawing of certificate based authentication.

pp; 12 DwgNo 5/7

Title Terms: COMPUTER; PROGRAM; CERTIFY; BASED; AUTHENTICITY; SYSTEM; NETWORK; ARCHITECTURE; COMMUNICATE; MODULE; PACKET; COMPRISE; TOKEN; SIGNATURE; CERTIFY; CHAIN; VERIFICATION; USER; AUTHENTICITY

Derwent Class: W01

International Patent Class (Main): H04L-009/00

File Segment: EPI

4/5/38 (Item 23 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013455792 \*\*Image available\*\*

WPI Acc No: 2000-627735/200060

XRPX Acc No: N00-465078

**End-to-end route selection in compound wide or local area networks, involves establishing route by selecting route between branch network and origin or destination node in branch network**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: PETERS M L

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| US 6097727 | A    | 20000801 | US 97841212 | A    | 19970429 | 200060 B |

Priority Applications (No Type Date): US 97841212 A 19970429

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC    | Filing Notes |
|------------|------|-----|----|-------------|--------------|
| US 6097727 | A    |     | 40 | H04L-012/28 |              |

Abstract (Basic): US 6097727 A

NOVELTY - A route calculated by a network node is established between origin node and destination node by selecting a route between branch network and one of the origin node or destination node in the branch network. The selected route is modified to expand the selected route to one of the origin node or the destination node to establish a modified route.

DETAILED DESCRIPTION - A route is established between origin node and destination node. The route is modified by modifying tail vectors of the origin node or destination node in the branch network to represent tail vectors of an intermediate node. The modified tail vectors are passed to the network node. A selected route between the first branch network and one of the origin node or destination node not in the first branch network is received. A link connecting the intermediate node and origin or destination node in the branch network is added to the selected route. INDEPENDENT CLAIMS are also included for the following:

- (a) system for establishing communication path;
- (b) program for establishing communication path

USE - For end to end route selection in compound wide or local area network.

ADVANTAGE - Provides complete end-to-end, non-disruptive re-routing without adversely affecting the routing algorithms ordinarily implemented in an APPN network. Improves establishment of end-to-end communication path in a relatively large communication network.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the single combined local area network or wide area network.

pp; 40 DwgNo 1/18

Title Terms: END; END; ROUTE; SELECT; COMPOUND; WIDE; LOCAL; AREA; NETWORK; ESTABLISH; ROUTE; SELECT; ROUTE; BRANCH; NETWORK; ORIGIN; DESTINATION;

NODE; BRANCH; NETWORK  
Derwent Class: W01  
International Patent Class (Main): H04L-012/28  
File Segment: EPI

4/5/39 (Item 24 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013441813  
WPI Acc No: 2000-613756/200059  
XRPX Acc No: N00-454782

**X.509 certificate capable of supporting cryptographic algorithms for security of transactions and documents on the Internet using public key to identify alternative algorithm signature extensions**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: PETERS M E

Number of Countries: 003 Number of Patents: 004

Patent Family:

| Patent No     | Kind | Date     | Applicat No | Kind | Date     | Week     |
|---------------|------|----------|-------------|------|----------|----------|
| GB 2347057    | A    | 20000823 | GB 9929705  | A    | 19991217 | 200059 B |
| JP 2000224164 | A    | 20000811 | JP 20009659 | A    | 20000119 | 200059   |
| KR 2000057771 | A    | 20000925 | KR 20002345 | A    | 20000119 | 200122   |
| GB 2347057    | B    | 20031105 | GB 9929705  | A    | 19991217 | 200377   |

Priority Applications (No Type Date): US 99240265 A 19990129

Patent Details:

| Patent No     | Kind | Lan | Pg | Main IPC    | Filing Notes |
|---------------|------|-----|----|-------------|--------------|
| GB 2347057    | A    |     | 11 | H04L-009/32 |              |
| JP 2000224164 | A    |     | 8  | H04L-009/32 |              |
| KR 2000057771 | A    |     |    | H04L-009/14 |              |
| GB 2347057    | B    |     |    | H04L-009/32 |              |

Abstract (Basic): GB 2347057 A

NOVELTY - Algorithm signature extensions (74) define a second (or more) cryptographic algorithm utilized to verify the certificate. These are not authenticated by the primary signature and signature algorithm, they are reviewed by a receiving entity if the entity does not support the algorithm of the primary signature.

USE - For security of transactions and documents on the Internet.

ADVANTAGE - A new certificate hierarchy while maintaining backward compatibility is not required to support one or more encryption algorithms.

DESCRIPTION OF DRAWING(S) - The figure shows an illustration of an X.509 certificate having extensions capable of supporting one or more cryptographic algorithms.

Algorithm Signature Extensions (74)

pp; 11 DwgNo 0/4

Title Terms: CERTIFY; CAPABLE; SUPPORT; CRYPTOGRAPHIC; ALGORITHM; SECURE; TRANSACTION; DOCUMENT; PUBLIC; KEY; IDENTIFY; ALTERNATIVE; ALGORITHM; SIGNATURE; EXTEND

Derwent Class: P85; W01

International Patent Class (Main): H04L-009/14 ; H04L-009/32

International Patent Class (Additional): G09C-001/00

File Segment: EPI; EngPI

4/5/40 (Item 25 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013396471 \*\*Image available\*\*  
WPI Acc No: 2000-568409/200053  
XRPX Acc No: N00-419941

**Web content compatibility procedure for data processing system, involves dispersing compatible function between client data processing system and**

**server data processing system**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )  
Inventor: BRITTON K H; CHOI O H; FLOYD R A; HAYES K F; KESSLER C S; MILLER

B A; **TOPOL B B**

Number of Countries: 005 Number of Patents: 006

Patent Family:

| Patent No     | Kind | Date     | Applicat No | Kind | Date     | Week     |
|---------------|------|----------|-------------|------|----------|----------|
| JP 2000222274 | A    | 20000811 | JP 20002123 | A    | 20000111 | 200053 B |
| GB 2348525    | A    | 20001004 | GB 9929750  | A    | 19991217 | 200053   |
| CA 2292327    | A1   | 20000726 | CA 2292327  | A    | 19991216 | 200054   |
| KR 2000053468 | A    | 20000825 | KR 20001453 | A    | 20000113 | 200121   |
| GB 2348525    | B    | 20031112 | GB 9929750  | A    | 19991217 | 200375   |
| US 6654814    | B1   | 20031125 | US 99237544 | A    | 19990126 | 200378   |

Priority Applications (No Type Date): US 99237544 A 19990126

Patent Details:

| Patent No     | Kind | Lan | Pg | Main IPC    | Filing Notes |
|---------------|------|-----|----|-------------|--------------|
| JP 2000222274 | A    |     | 24 | G06F-012/00 |              |
| GB 2348525    | A    |     |    | G06F-009/46 |              |
| CA 2292327    | A1 E |     |    | H04L-012/12 |              |
| KR 2000053468 | A    |     |    | G06F-015/16 |              |
| GB 2348525    | B    |     |    | G06F-009/46 |              |
| US 6654814    | B1   |     |    | G06F-015/16 |              |

Abstract (Basic): JP 2000222274 A

NOVELTY - An information on specific session is acquired from a data processing system. A compatible function is dispersed between a client data processing system and server data processing system based on the acquired information on a specific session.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the web content compatibility system.

USE - For forwarding and displaying of web content between data processing system.

ADVANTAGE - Improves content compatibility for data processing systems e.g. computer device.

DESCRIPTION OF DRAWING(S) - The figure shows the explanatory diagram of a web content compatibility system.

pp; 24 DwgNo 1/5

Title Terms: WEB; CONTENT; COMPATIBLE; PROCEDURE; DATA; PROCESS; SYSTEM;  
DISPERSE; COMPATIBLE; FUNCTION; CLIENT; DATA; PROCESS; SYSTEM; SERVE;  
DATA; PROCESS; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-009/46; G06F-012/00; G06F-015/16;  
**H04L-012/12**

International Patent Class (Additional): G06F-009/06; G06F-013/00;  
G06F-015/00; G11B-023/00

File Segment: EPI

**4/5/41 (Item 26 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013373520

WPI Acc No: 2000-545458/200050

XRPX Acc No: N00-403555

**Web page content tailoring method for use in the displaying of web pages, converts the web page from HTML into XML, before tailoring it to suit a specific client display and then converting it back to HTML**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC );  
BRITTON K H (BRIT-I); IMS S D (IMSS-I); TOPOL B B (TOPO-I)

Inventor: BRITTON K H; IMS S D; **TOPOL B B**

Number of Countries: 005 Number of Patents: 008

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| GB 2346238 | A    | 20000802 | GB 9929939  | A    | 19991220 | 200050 B |
| CA 2292336 | A1   | 20000729 | CA 2292336  | A    | 19991216 | 200051   |

JP 2000222275 A 20000811 JP 200017102 A 20000126 200053  
 KR 2000053638 A 20000825 KR 20003971 A 20000127 200121  
 US 20020059344 A1 20020516 US 99239935 A 19990129 200237  
 KR 346616 B 20020726 KR 20003971 A 20000127 200309  
 US 6535896 B2 20030318 US 99239935 A 19990129 200322  
 GB 2346238 B 20030604 GB 9929939 A 19991220 200345

Priority Applications (No Type Date): US 99239935 A 19990129

Patent Details:

| Patent No      | Kind | Lan | Pg | Main IPC    | Filing Notes                        |
|----------------|------|-----|----|-------------|-------------------------------------|
| GB 2346238     | A    |     | 16 | G06F-017/30 |                                     |
| CA 2292336     | A1   | E   |    | H04L-012/12 |                                     |
| JP 2000222275  | A    |     | 14 | G06F-012/00 |                                     |
| KR 2000053638  | A    |     |    | G06F-017/00 |                                     |
| US 20020059344 | A1   |     |    | G06F-015/00 |                                     |
| KR 346616      | B    |     |    | G06F-017/00 | Previous Publ. patent KR 2000053638 |
| US 6535896     | B2   |     |    | G06F-017/00 |                                     |
| GB 2346238     | B    |     |    | G06F-017/30 |                                     |

Abstract (Basic): GB 2346238 A

NOVELTY - The web page content tailoring method for a client device consists of receiving a request from the client device for a web page. The first content portion of the web page's HTML format is converted into XML format. The first portion is then tailored to suit the client device display, before being converted back to HTML format. This is then repeated for all other portions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(a) a system for tailoring web pages; and

(b) a computer program product..

USE - For use in the displaying of web pages.

ADVANTAGE - The system allows web page formats to be individually tailored for specific client devices.

pp; 16 DwgNo 0/2

Title Terms: WEB; PAGE; CONTENT; TAILORED; METHOD; DISPLAY; WEB; PAGE;  
 CONVERT; WEB; PAGE; TAILORED; SUIT; SPECIFIC; CLIENT; DISPLAY; CONVERT;  
 BACK

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-015/00; G06F-017/00;  
 G06F-017/30; H04L-012/12

International Patent Class (Additional): G06F-003/14; G06F-013/00;  
 G06F-017/22; G11B-023/00; H04L-012/16

File Segment: EPI

4/5/42 (Item 27 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

012917549 \*\*Image available\*\*

WPI Acc No: 2000-089385/200008

XRPX Acc No: N00-070375

**Service provision method for universal personal telecommunications network**

Patent Assignee: ALCATEL (COGE ); ALCATEL ALSTHOM CIE GEN ELECTRICITE  
 (COGE )

Inventor: PETERS M J H

Number of Countries: 030 Number of Patents: 007

Patent Family:

| Patent No      | Kind | Date     | Applicat No  | Kind | Date     | Week     |
|----------------|------|----------|--------------|------|----------|----------|
| EP 969645      | A1   | 20000105 | EP 98401676  | A    | 19980703 | 200008 B |
| AU 9937955     | A    | 20000120 | AU 9937955   | A    | 19990701 | 200015   |
| CA 2276886     | A1   | 20000103 | CA 2276886   | A    | 19990702 | 200025   |
| CN 1248113     | A    | 20000322 | CN 99110138  | A    | 19990702 | 200032   |
| JP 2000216826  | A    | 20000804 | JP 99172924  | A    | 19990618 | 200042   |
| US 6337981     | B1   | 20020108 | US 99340675  | A    | 19990629 | 200211   |
| US 20020045446 | A1   | 20020418 | US 99340675  | A    | 19990629 | 200228   |
|                |      |          | US 200126768 | A    | 20011227 |          |

|            |   |             |                                  |
|------------|---|-------------|----------------------------------|
| CA 2227120 | A | H04L-012/56 |                                  |
| US 6163547 | A | H04J-003/16 |                                  |
| AU 735399  | B | H04Q-007/20 | Previous Publ. patent AU 9853009 |
| CN 1191457 | A | H04Q-007/20 |                                  |

Abstract (Basic): EP 859533 A

The mobile telecommunication system includes at least one transceiver station (BTS1) coupled to a mobile terminal (MT) via a radio link and adapted to exchange mobile information (AAL-SDU: MUD, MSI) with a telecommunication controller (TC: BSC1-2; MSC). The mobile information includes a predetermined telecommunication signaling (HOCOM) to be transported to the controller. The transceiver station (BTS1) includes a first mapping and loading device (SART) for mapping the mobile information into first packets (CPS; AAL-PDU) and to load the first packets into second packets (ATM) to be transmitted to the controller. The controller (TC: BSC1-2; MSC) has a second mapping and loading device (SARS1; SARS2) for unloading the first packets from the second packets. Each of the first packets (CPS; AAL-PDU) comprises a payload (PLD1; PLD) and a control part (HD1; TRL).

The first mapping and loading device (SART) of the transceiver station (BTS1) maps the predetermined telecommunication signalling (HOCOM) into a predetermined field (CPS-UII; CPCS-UU) of the control part of the first packets and to map the remainder of the mobile information (AAL-SDU: MUD, MSI) into the payload of the first packets. The second mapping and loading device (SARS1; SARS2) of the controller (TC: BSC1-2; MSC) extracts the predetermined signalling (HOCOM) from the predetermined field of the control part of the first packets.

ADVANTAGE - Reduces complexity of system. Mobile information includes User-to-User indication field CPS-UII or CPCS-UU, respectively, that transparently transports user data and signalling in up-link to Base Station Controller or to Mobile Services switching centre, or, in down-link, to base transceiver station.

Dwg.1/3

Title Terms: MOBILE; TELECOMMUNICATION; SYSTEM; BASE; TRANSCEIVER; STATION; COUPLE; MOBILE; TERMINAL; RADIO; LINK; EXCHANGE; MOBILE; INFORMATION; TELECOMMUNICATION; CONTROL; INFORMATION; CONTAIN; SIGNAL; HAND; COMMAND; TRANSPORT; CONTROL

Derwent Class: W01; W02

International Patent Class (Main): H04J-003/16; H04L-012/56 ; H04Q-007/20; H04Q-007/22; H04Q-011/04

International Patent Class (Additional): H04L-012/28 ; H04Q-007/28; H04Q-007/36

File Segment: EPI

4/5/45 (Item 30 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

010859461 \*\*Image available\*\*

WPI Acc No: 1996-356412/199636

XRPX Acc No: N96-300593

**Transaction message routing in digital communication network - involves defining origin and destination addresses and editing stacked and nested multi-element address specification to allow messages to be launched onto network without full knowledge of destination**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: BLAKELEY D B; HIND J R ; HOUSEL B C; KINGSTON W A

Number of Countries: 005 Number of Patents: 008

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| EP 725523  | A2   | 19960807 | EP 95480177 | A    | 19951206 | 199636 B |
| US 5563878 | A    | 19961008 | US 95369051 | A    | 19950105 | 199646   |
| JP 8292908 | A    | 19961105 | JP 95337586 | A    | 19951225 | 199703   |
| EP 725523  | A3   | 19970806 | EP 95480177 | A    | 19951206 | 199743   |
| US 5734651 | A    | 19980331 | US 95369051 | A    | 19950105 | 199820   |
|            |      |          | US 96655343 | A    | 19960529 |          |

|             |    |          |             |   |          |        |
|-------------|----|----------|-------------|---|----------|--------|
| JP 3229183  | B2 | 20011112 | JP 95337586 | A | 19951225 | 200174 |
| EP 725523   | B1 | 20030723 | EP 95480177 | A | 19951206 | 200356 |
| DE 69531337 | E  | 20030828 | DE 631337   | A | 19951206 | 200364 |
|             |    |          | EP 95480177 | A | 19951206 |        |

Priority Applications (No Type Date): US 95369051 A 19950105; US 96655343 A 19960529

Cited Patents: No-SR.Pub; EP 282198; EP 608653; GB 2268374; US 5105424

#### Patent Details:

| Patent No                              | Kind | Lan | Pg | Main IPC    | Filing Notes                                                 |
|----------------------------------------|------|-----|----|-------------|--------------------------------------------------------------|
| EP 725523                              | A2   | E   | 19 | H04L-012/56 |                                                              |
| Designated States (Regional): DE FR GB |      |     |    |             |                                                              |
| US 5563878                             | A    |     | 16 | H04L-012/56 |                                                              |
| JP 8292908                             | A    |     | 18 | G06F-012/00 |                                                              |
| EP 725523                              | A3   |     |    | H04L-012/56 |                                                              |
| US 5734651                             | A    |     | 15 | H04L-012/56 | Cont of application US 95369051<br>Cont of patent US 5563878 |
| JP 3229183                             | B2   |     | 19 | H04L-012/56 | Previous Publ. patent JP 8292908                             |
| EP 725523                              | B1   | E   |    | H04L-012/56 |                                                              |
| Designated States (Regional): DE FR GB |      |     |    |             |                                                              |
| DE 69531337                            | E    |     |    | H04L-012/56 | Based on patent EP 725523                                    |

#### Abstract (Basic): EP 725523 A

The method for routing messages through packet communication networks involves defining origin and destination addresses with a stack of nested multi-element address specifications, and editing at least one intermediate node in the networks, the stacked and nested multi-element address specifications.

Pref., each of the multi-element address specifications identifies a node on the network and a user agent on the networks. They also specify arbitrary parameters to the agent on the networks. The process of editing involves popping one of the multi-element address specifications off one of the stacks. A new multi-element address specification is pushed onto one of the stacks.

ADVANTAGE - Allows messages to be launched on networks where originating station does not have full knowledge of destination station. Editing function is under control of edit table which contains specific directions for editing particular NAPS. Permits deferred routing to accommodate link features or congestion and data dependent routing, route dependent data processing and administrative processing at internetwork boundaries.

Dwg.1/6

Title Terms: TRANSACTION; MESSAGE; ROUTE; DIGITAL; COMMUNICATE; NETWORK; DEFINE; ORIGIN; DESTINATION; ADDRESS; EDIT; STACK; NEST; MULTI; ELEMENT; ADDRESS; SPECIFICATION; ALLOW; MESSAGE; LAUNCH; NETWORK; FULL; DESTINATION

Derwent Class: W01

International Patent Class (Main): G06F-012/00; **H04L-012/56**

International Patent Class (Additional): G06F-013/00; H04M-003/42

File Segment: EPI

**4/5/46 (Item 31 from file: 350)**

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009998616 \*\*Image available\*\*

WPI Acc No: 1994-266327/199433

XRPX Acc No: N94-209605

**Packet network resource management using sub-nodes within nodes - allows flexibility in control point association with particular sub-node, all control functions being capable of execution therewithin**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: DERBY J H; DRAKE J E; DUDLEY J G; GUERIN R; KAPLAN M A; MARIN G A ; **PETERS M L** ; POTTER K H

Number of Countries: 005 Number of Patents: 005

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| EP 613316  | A2   | 19940831 | EP 93480229 | A    | 19931215 | 199433 B |
| JP 7007525 | A    | 19950110 | JP 93319558 | A    | 19931220 | 199511   |
| US 5425021 | A    | 19950613 | US 9310136  | A    | 19930128 | 199529   |
| EP 613316  | A3   | 19950412 | EP 93480229 | A    | 19931215 | 199544   |
| US 5483522 | A    | 19960109 | US 9310136  | A    | 19930128 | 199608   |
|            |      |          | US 94333194 | A    | 19941102 |          |

Priority Applications (No Type Date): US 9310136 A 19930128; US 94333194 A 19941102

Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 204959; US 4864559

#### Patent Details:

| Patent No                              | Kind | Lan | Pg | Main IPC    | Filing Notes                                                |
|----------------------------------------|------|-----|----|-------------|-------------------------------------------------------------|
| EP 613316                              | A2   | E   | 15 | H04Q-011/04 |                                                             |
| Designated States (Regional): DE FR GB |      |     |    |             |                                                             |
| JP 7007525                             | A    |     | 13 | H04L-012/56 |                                                             |
| US 5425021                             | A    |     | 12 | H04J-003/24 |                                                             |
| US 5483522                             | A    |     | 12 | H04J-003/24 | Cont of application US 9310136<br>Cont of patent US 5425021 |
| EP 613316                              | A3   |     |    | H04Q-011/04 |                                                             |

#### Abstract (Basic): EP 613316 A

Within the packet-switching network, limited internal node communication facilities are made externally visible through the topology database by creating sub-nodes connected with intra-node links as subsidiary parts of a node. The sub-nodes contain switching mechanism and associated adapters within the node.

Preferably, intra-node links represent a bandwidth-limited facility such as a cable, channel or bus between two switching mechanisms. The sub-node switching mechanism, on the other hand, has sufficient bandwidth capacity for all connections which it supports, without restricting network traffic throughput.

USE/ADVANTAGE - High-speed packet-switching networks. Allows network nodal control functions, e.g. topology, directory, path selection, bandwidth management and reservation to manage bandwidth-limited internal node communication facilities between multiple switching mechanisms.

Dwg.6/8

Title Terms: PACKET; NETWORK; RESOURCE; MANAGEMENT; SUB; NODE; NODE; ALLOW; FLEXIBLE; CONTROL; POINT; ASSOCIATE; SUB; NODE; CONTROL; FUNCTION; CAPABLE; EXECUTE

Derwent Class: W01

International Patent Class (Main): H04J-003/24; H04L-012/56 ; H04Q-011/04

International Patent Class (Additional): H04L-012/28

File Segment: EPI

4/5/47 (Item 32 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009889374 \*\*Image available\*\*

WPI Acc No: 1994-169290/199421

XRPX Acc No: N94-133303

**Cooperative method for forming and maintaining access groups at LAN-WAN interface - using one access agent within group as leader to communicate with all other access agents , each contg. finite state machine to perform task and maintenance operations**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM ) ; IBM CORP (IBM )

Inventor: DERBY J H; DOERING W A; DRAKE J E; DYKEMAN D H; LI L; PETERS M L ; SANDICK H J; VU K V

Number of Countries: 006 Number of Patents: 007

#### Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| EP 598674  | A1   | 19940525 | EP 93480165 | A    | 19931019 | 199421 B |
| CA 2100542 | A    | 19940517 | CA 2100542  | A    | 19930714 | 199430   |
| US 5365523 | A    | 19941115 | US 92976826 | A    | 19921116 | 199445   |



|             |    |          |             |   |          |        |
|-------------|----|----------|-------------|---|----------|--------|
| JP 6350652  | A  | 19941222 | JP 93252917 | A | 19931008 | 199510 |
| CA 2100542  | C  | 19990216 | CA 2100542  | A | 19930714 | 199918 |
| EP 598674   | B1 | 20020807 | EP 93480165 | A | 19931019 | 200259 |
| DE 69332185 | E  | 20020912 | DE 632185   | A | 19931019 | 200268 |
|             |    |          | EP 93480165 | A | 19931019 |        |

Priority Applications (No Type Date): US 92976826 A 19921116

Cited Patents: 02Jnl.Ref; EP 234191; EP 511142

#### Patent Details:

| Patent No | Kind | Lan Pg | Main IPC | Filing Notes |
|-----------|------|--------|----------|--------------|
|-----------|------|--------|----------|--------------|

|           |    |   |    |             |
|-----------|----|---|----|-------------|
| EP 598674 | A1 | E | 31 | H04L-012/66 |
|-----------|----|---|----|-------------|

Designated States (Regional): DE FR GB

|            |   |  |  |             |
|------------|---|--|--|-------------|
| CA 2100542 | A |  |  | H04L-012/66 |
|------------|---|--|--|-------------|

|            |   |  |    |             |
|------------|---|--|----|-------------|
| US 5365523 | A |  | 31 | H04L-012/46 |
|------------|---|--|----|-------------|

|            |   |  |    |             |
|------------|---|--|----|-------------|
| JP 6350652 | A |  | 32 | H04L-012/66 |
|------------|---|--|----|-------------|

|            |   |  |  |             |
|------------|---|--|--|-------------|
| CA 2100542 | C |  |  | H04L-012/66 |
|------------|---|--|--|-------------|

|           |    |   |  |             |
|-----------|----|---|--|-------------|
| EP 598674 | B1 | E |  | H04L-012/66 |
|-----------|----|---|--|-------------|

Designated States (Regional): DE FR GB

|             |   |  |  |             |                           |
|-------------|---|--|--|-------------|---------------------------|
| DE 69332185 | E |  |  | H04L-012/66 | Based on patent EP 598674 |
|-------------|---|--|--|-------------|---------------------------|

#### Abstract (Basic): EP 598674 A

The method involves negotiating leadership of a group of access agents with all other access agents common to the LAN. Conflicts in negotiation are resolved, and each member assumes the role of group leader or the role of a member of the group.

Group operational integrity is maintained after the group has been formed whereby the communication system may manage the access agents as a group. A group is formed into multiple smaller groups when after detecting a break in the group communication integrity, and the integrity is maintained by merging smaller groups into a large group when a bridge is added between the LAN segments.

ADVANTAGE - Reduces wasted communication power at interface between LAN and WAN.

Dwg.1/16

Title Terms: COOPERATE; METHOD; FORMING; MAINTAIN; ACCESS; GROUP; LAN; WAN; INTERFACE; ONE; ACCESS; AGENT; GROUP; LEADER; COMMUNICATE; ACCESS; AGENT; CONTAIN; FINITE; STATE; MACHINE; PERFORMANCE; TASK; MAINTAIN; OPERATE

Derwent Class: W01

International Patent Class (Main): H04L-012/46 ; H04L-012/66

International Patent Class (Additional): H04L-012/28

File Segment: EPI

4/5/48 (Item 33 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009889371 \*\*Image available\*\*

WPI Acc No: 1994-169287/199421

XRPX Acc No: N94-133300

**Packet transmission network specifying node control functions using multi-cast tree routing - uses header routing and copy ID fields for directing message to specified nodes, and for designating control functions to be performed at nodes**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: CIDON I; DERBY J H; DRAKE J E; DUDLEY J G; GOPAL I S; HERVATIC E

A; JANNIELLO J P; KAPLAN M A; KESNER B A; KOPERDA F R; MARIN G A; **PETERS**

**M L** ; POTTER K H; TSIGLER A L; KESNER B

Number of Countries: 015 Number of Patents: 010

#### Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| EP 598671  | A2   | 19940525 | EP 93480067 | A    | 19930603 | 199421 B |
| CA 2100539 | A    | 19940520 | CA 2100539  | A    | 19930714 | 199430   |
| JP 6216942 | A    | 19940805 | JP 93267002 | A    | 19931026 | 199436   |
| TW 235387  | A    | 19941201 | TW 94100612 | A    | 19940125 | 199507   |
| CN 1089420 | A    | 19940713 | CN 93114786 | A    | 19931118 | 199533   |
| EP 598671  | A3   | 19950125 | EP 93480067 | A    | 19930603 | 199539   |

|             |    |          |             |   |          |        |
|-------------|----|----------|-------------|---|----------|--------|
| CA 2100539  | C  | 19900525 | CA 2100539  | A | 19930714 | 199939 |
| EP 598671   | B1 | 20011212 | EP 93480067 | A | 19930603 | 200204 |
| DE 69331310 | E  | 20020124 | DE 631310   | A | 19930603 | 200215 |
|             |    |          | EP 93480067 | A | 19930603 |        |
| ES 2168093  | T3 | 20020601 | EP 93480067 | A | 19930603 | 200247 |

Priority Applications (No Type Date): US 92978609 A 19921119

Cited Patents: No-SR.Pub; EP 303830; EP 404339; US 4813038

#### Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|----------|--------------|
|-----------|------|-----|----|----------|--------------|

|           |    |   |    |             |  |
|-----------|----|---|----|-------------|--|
| EP 598671 | A2 | E | 17 | H04L-012/56 |  |
|-----------|----|---|----|-------------|--|

Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE

|            |   |  |  |             |  |
|------------|---|--|--|-------------|--|
| CA 2100539 | A |  |  | H04L-012/56 |  |
|------------|---|--|--|-------------|--|

|            |   |  |    |             |  |
|------------|---|--|----|-------------|--|
| JP 6216942 | A |  | 15 | H04L-012/56 |  |
|------------|---|--|----|-------------|--|

|           |   |  |  |             |  |
|-----------|---|--|--|-------------|--|
| TW 235387 | A |  |  | H04L-012/54 |  |
|-----------|---|--|--|-------------|--|

|            |   |  |  |             |  |
|------------|---|--|--|-------------|--|
| CN 1089420 | A |  |  | H04Q-003/12 |  |
|------------|---|--|--|-------------|--|

|           |    |  |  |             |  |
|-----------|----|--|--|-------------|--|
| EP 598671 | A3 |  |  | H04L-012/56 |  |
|-----------|----|--|--|-------------|--|

|            |   |   |  |             |  |
|------------|---|---|--|-------------|--|
| CA 2100539 | C | E |  | H04L-012/56 |  |
|------------|---|---|--|-------------|--|

|           |    |   |  |             |  |
|-----------|----|---|--|-------------|--|
| EP 598671 | B1 | E |  | H04L-012/56 |  |
|-----------|----|---|--|-------------|--|

Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE

|             |   |  |  |             |                           |
|-------------|---|--|--|-------------|---------------------------|
| DE 69331310 | E |  |  | H04L-012/56 | Based on patent EP 598671 |
|-------------|---|--|--|-------------|---------------------------|

|            |    |  |  |             |                           |
|------------|----|--|--|-------------|---------------------------|
| ES 2168093 | T3 |  |  | H04L-012/56 | Based on patent EP 598671 |
|------------|----|--|--|-------------|---------------------------|

Abstract (Basic): EP 598671 A

The network includes several nodes and transmits message packets.

Each packet includes a header having a routing field (42) for directing a message to specified nodes. The routing field may contain a multi-cast tree address or multiple labels specifying nodes to receive a message packet.

The header also includes two control bytes (38,40) which designate various control functions to be performed at the specified nodes. Pref. one control byte (38) specifies the routing mode and priority. Pref. the other control byte (40) includes a copy ID field (34) specifying which of one or more control functions are to be performed at a node.

ADVANTAGE - Enables control functions to be distributed among several adaptors of node without needless copying. Processing time minimised. Node operating speed maximised.

Dwg.4/12

Title Terms: PACKET; TRANSMISSION; NETWORK; SPECIFIED; NODE; CONTROL; FUNCTION; MULTI; CAST; TREE; ROUTE; HEADER; ROUTE; COPY; ID; FIELD; DIRECT; MESSAGE; SPECIFIED; NODE; DESIGNATED; CONTROL; FUNCTION; PERFORMANCE; NODE

Derwent Class: W01

International Patent Class (Main): H04L-012/54 ; H04L-012/56 ;

H04Q-003/12

International Patent Class (Additional): H04J-003/02; H04L-012/18 ;

H04Q-011/04

File Segment: EPI

4/5/49 (Item 34 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009714044 \*\*Image available\*\*

WPI Acc No: 1993-407597/199351

XRPX Acc No: N93-315511

**Multi-cast network communication system - has communication path making up multi-cast tree itself separated from control and administration of network.**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: AUERBACH J S; CHOW C; DRAKE J E; GOPAL P M; HERVATIC E A; KAPLAN

M A; PETERS M L ; WARD M J; QUERBACH J S

Number of Countries: 019 Number of Patents: 014

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| EP 575281  | A2   | 19931222 | EP 93480060 | A    | 19930519 | 199351 B |
| BR 9302034 | A    | 19940111 | BR 932034   | A    | 19930524 | 199406   |

|             |    |          |             |   |          |        |
|-------------|----|----------|-------------|---|----------|--------|
| AU 9338391  | A  | 19931223 | AU 9338391  | A | 19930506 | 199407 |
| CA 2094409  | A  | 19931219 | CA 2094409  | A | 19930420 | 199410 |
| JP 6062029  | A  | 19940304 | JP 93122965 | A | 19930525 | 199414 |
| TW 230286   | A  | 19940911 | TW 93103087 | A | 19930422 | 199440 |
| US 5355371  | A  | 19941011 | US 92900628 | A | 19920618 | 199440 |
| AU 661144   | B  | 19950713 | AU 9338391  | A | 19930506 | 199535 |
| EP 575281   | A3 | 19960214 | EP 93480060 | A | 19930519 | 199622 |
| CN 1081055  | A  | 19940119 | CN 93107293 | A | 19930614 | 199712 |
| CA 2094409  | C  | 19980714 | CA 2094409  | A | 19930420 | 199839 |
| KR 9614978  | B1 | 19961023 | KR 9311005  | A | 19930614 | 199929 |
| EP 575281   | B1 | 19991117 | EP 93480060 | A | 19930519 | 199953 |
| DE 69327017 | E  | 19991223 | DE 627017   | A | 19930519 | 200006 |
|             |    |          | EP 93480060 | A | 19930519 |        |

Priority Applications (No Type Date): US 92900628 A 19920618

Cited Patents: -SR.Pub; 3.Jnl.Ref; EP 180990

# Patent Details:

| Patent No                                                      | Kind | Lan | Pg | Main IPC    | Filing Notes                     |
|----------------------------------------------------------------|------|-----|----|-------------|----------------------------------|
| EP 575281                                                      | A2   | E   | 24 | H04L-012/18 |                                  |
| Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE |      |     |    |             |                                  |
| DE 69327017                                                    | E    |     |    | H04L-012/18 | Based on patent EP 575281        |
| US 5355371                                                     | A    |     | 22 | H04L-012/46 |                                  |
| AU 661144                                                      | B    |     |    | H04L-012/18 | Previous Publ. patent AU 9338391 |
| EP 575281                                                      | B1   | E   |    | H04L-012/18 |                                  |
| Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE |      |     |    |             |                                  |
| BR 9302034                                                     | A    |     |    | G06F-013/00 |                                  |
| AU 9338391                                                     | A    |     |    | H04L-012/18 |                                  |
| CA 2094409                                                     | A    |     |    | H04L-012/56 |                                  |
| JP 6062029                                                     | A    |     |    | H04L-012/44 |                                  |
| TW 230286                                                      | A    |     |    | H04L-029/02 |                                  |
| EP 575281                                                      | A3   |     |    | H04L-012/18 |                                  |
| CN 1081055                                                     | A    |     |    | H04Q-011/04 |                                  |
| CA 2094409                                                     | C    |     |    | H04L-012/56 |                                  |
| KR 9614978                                                     | B1   |     |    | H04L-012/28 |                                  |

## Abstract. (Basic): EP.575281 A

The network includes a protocol for allowing distribution trees to span a set of members, in which the tree itself may be created and maintained separately from the creation and management of the set of users and of the network.

A distribution tree is created by a Tree Leader having knowledge of the present set membership, and of the network topology given to it by a set manager. Transmission distribution trees are set up when a transmission request is received and the properties of the transmission path that is required are known.

ADVANTAGE - Multicast tree communication routes are set up independent of the control and administration of the multicast user set itself.

Dwg.1/7

Title Terms: MULTI; CAST; NETWORK; COMMUNICATE; SYSTEM; COMMUNICATE; PATH; UP; MULTI; CAST; TREE; SEPARATE; CONTROL; ADMINISTER; NETWORK

Derwent Class: W01

International Patent Class (Main): G06F-013/00; H04L-012/18 ; H04L-012/28 ; H04L-012/44 ; H04L-012/46 ; H04L-012/56 ; H04L-029/02 ; H04Q-011/04

International Patent Class (Additional): H04J-003/24; H04L-012/24 ; H04L-029/04

File Segment: EPI

4/5/50 (Item 35 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009714042 \*\*Image available\*\*

WPI Acc No: 1993-407595/199351

XRPX Acc No: N93-315509

**Distributed management system for multinode, multicase communications**

network - has distributed control for creation, administration and operational mode selection operative in each of network nodes

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: AUERBACH J S; DRAKE J E; GOPAL P M; HERVATIC E A; KAPLAN M A; KUTTEN S; **PETERS M L** ; WARD M J

Number of Countries: 018 Number of Patents: 013

Patent Family:

| Patent No   | Kind | Date     | Applicat No | Kind | Date     | Week     |
|-------------|------|----------|-------------|------|----------|----------|
| EP 575279   | A2   | 19931222 | EP 93480056 | A    | 19930505 | 199351 B |
| AU 9338390  | A    | 19931223 | AU 9338390  | A    | 19930506 | 199407   |
| CA 2094410  | A    | 19931219 | CA 2094410  | A    | 19930420 | 199410   |
| TW 223201   | A    | 19940501 | TW 93103090 | A    | 19930422 | 199423   |
| JP 6152593  | A    | 19940531 | JP 93135505 | A    | 19930607 | 199426   |
| AU 659546   | B    | 19950518 | AU 9338390  | A    | 19930506 | 199528   |
| EP 575279   | A3   | 19940817 | EP 93480056 | A    | 19930505 | 199530   |
| CN 1081042  | A    | 19940119 | CN 93107296 | A    | 19930614 | 199712   |
| US 5634011  | A    | 19970527 | US 92900647 | A    | 19920618 | 199727   |
|             |      |          | US 95517305 | A    | 19950821 |          |
| CA 2094410  | C    | 19980505 | CA 2094410  | A    | 19930420 | 199829   |
| KR 9614979  | B1   | 19961023 | KR 9311007  | A    | 19930614 | 199929   |
| EP 575279   | B1   | 20030723 | EP 93480056 | A    | 19930505 | 200356   |
| DE 69333105 | E    | 20030828 | DE 633105   | A    | 19930505 | 200364   |
|             |      |          | EP 93480056 | A    | 19930505 |          |

Priority Applications (No Type Date): US 92900647 A 19920618; US 95517305 A 19950821

Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 361649

Patent Details:

| Patent No   | Kind                                                           | Lan | Pg | Main IPC    | Filing Notes                     |
|-------------|----------------------------------------------------------------|-----|----|-------------|----------------------------------|
| EP 575279   | A2                                                             | E   | 28 | H04L-012/24 |                                  |
|             | Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE |     |    |             |                                  |
| AU 9338390  | A                                                              |     |    | H04L-012/24 |                                  |
| CA 2094410  | A                                                              |     |    | H04L-012/56 |                                  |
| TW 223201   | A                                                              |     |    | H04L-029/02 |                                  |
| JP 6152593  | A                                                              |     | 26 | H04L-012/00 |                                  |
| AU 659546   | B                                                              |     |    | H04L-012/24 | Previous Publ. patent AU 9338390 |
| EP 575279   | A3                                                             |     |    | H04L-012/24 |                                  |
| CN 1081042  | A                                                              |     |    | H04L-012/56 |                                  |
| US 5634011  | A                                                              |     | 27 | H01H-067/00 | Cont of application US 92900647  |
| CA 2094410  | C                                                              |     |    | H04L-012/56 |                                  |
| KR 9614979  | B1                                                             |     |    | H04L-012/28 |                                  |
| EP 575279   | B1                                                             | E   |    | H04L-012/24 |                                  |
|             | Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE |     |    |             |                                  |
| DE 69333105 | E                                                              |     |    | H04L-012/24 | Based on patent EP 575279        |

Abstract (Basic): EP 575279 A

The communications network management system has many interconnected nodes each having a set manager for controlling either creation of, administration or access to a set of users. The set manager maintains a record of the local subscribers. A set manager for each subscriber group is designated as set leader to maintain membership information about all the users in the multicast group.

One of the set managers is designated as the registrar which maintains a list of all the set leaders in the network. The registrar insures that there is only one set leader per user set, answers inquiries about membership and directs inquiries to appropriate set leaders if necessary.

ADVANTAGE - All functions can be carried out by any node. Assume function at new node when failure or partition occurs in network.

Dwg.2A/10

Title Terms: DISTRIBUTE; MANAGEMENT; SYSTEM; COMMUNICATE; NETWORK;

DISTRIBUTE; CONTROL; CREATION; ADMINISTER; OPERATE; MODE; SELECT; OPERATE ; NETWORK; NODE

Derwent Class: W01

International Patent Class (Main): H01H-067/00; H04L-012/00 ; H04L-012/24 ; H04L-012/28 ; H04L-012/56 ; H04L-029/02

International Patent Class (Additional): G06F-015/16; H04J-003/16;

H04L-005/22 ; H04L-012/18 ; H04L-012/26  
File Segment: EPI

| Set | Items   | Description                                                                                                                           |
|-----|---------|---------------------------------------------------------------------------------------------------------------------------------------|
| S1  | 13274   | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY       |
| S2  | 477029  | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPERTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML OR VCML |
| S3  | 1539922 | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?                                                                                |
| S4  | 5558    | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CYPHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT? OR CODE? ? OR CODED)            |
| S5  | 232986  | SUN() MICROSYSTEMS                                                                                                                    |
| S6  | 1888476 | S1 OR S2 OR S3                                                                                                                        |
| S7  | 304     | S6 (S) S4                                                                                                                             |
| S8  | 483828  | S1 OR S2                                                                                                                              |
| S9  | 53398   | S8 (S) S3                                                                                                                             |
| S10 | 21      | S9 (S) S4                                                                                                                             |
| S11 | 4       | S10 AND S5                                                                                                                            |
| S12 | 13      | S10 NOT PY>1999                                                                                                                       |
| S13 | 13      | S12 NOT PD>19991021                                                                                                                   |
| S14 | 9       | RD (unique items)                                                                                                                     |
| S15 | 4       | S11 NOT PY>1999                                                                                                                       |

File 15:ABI/Inform(R) 1971-2003/Dec 09  
(c) 2003 ProQuest Info&Learning

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

File 647:CMP Computer Fulltext 1988-2003/Dec W1  
(c) 2003 CMP Media, LLC

File 275:Gale Group Computer DB(TM) 1983-2003/Dec 10  
(c) 2003 The Gale Group

File 674:Computer News Fulltext 1989-2003/Dec W1  
(c) 2003 IDG Communications

File 696:DIALOG Telecom. Newsletters 1995-2003/Dec 10  
(c) 2003 The Dialog Corp.

File 624:McGraw-Hill Publications 1985-2003/Dec 10  
(c) 2003 McGraw-Hill Co. Inc

File 636:Gale Group Newsletter DB(TM) 1987-2003/Dec 10  
(c) 2003 The Gale Group

File 484:Periodical Abs Plustext 1986-2003/Nov W5  
(c) 2003 ProQuest

File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc

File 613:PR Newswire 1999-2003/Dec 11  
(c) 2003 PR Newswire Association Inc

File 16:Gale Group PROMT(R) 1990-2003/Dec 10  
(c) 2003 The Gale Group

File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 553:Wilson Bus. Abs. FullText 1982-2003/Oct  
(c) 2003 The HW Wilson Co

15/5,K/1 (Item 1 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2003 CMP Media, LLC. All rts. reserv.

01159069 CMP ACCESSION NUMBER: INW19980420S0004

**Netscape Pours On The Code** (This Just In...)

INTERNETWEEK, 1998, n 711, PG7

PUBLICATION DATE: 980420

JOURNAL CODE: INW LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Table Of Contents

WORD COUNT: 129

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, **Resource Description Format**, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be the earliest to expect a new version of a Navigator/Communicator 5.0 product. Meanwhile, Netscape officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications ; Sun  
**Microsystems**

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, **Resource Description Format**, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

...officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications ; Sun  
**Microsystems**

15/5,K/2 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02253199 SUPPLIER NUMBER: 53404096 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives ) (Industry Trend or Event)**

Kingsley, Lawrence

Seybold Report on Internet Publishing, 3, 3, NA(1)

Nov, 1998

ISSN: 1090-4808

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 1547 LINE COUNT: 00124

COMPANY NAMES: **Sun Microsystems** Inc.--Officials and employees; Oracle Corp.--Officials and employees

GEOGRAPHIC CODES/NAMES: 1USA United States

DESCRIPTORS: Trade show report; Company executive

NAMED PERSONS: Ellison, Lawrence J.--Addresses, essays, lectures; Gage, John--Addresses, essays, lectures; Joy, William N.--Addresses, essays, lectures

EVENT CODES/NAMES: 010 Forecasts, trends, outlooks;240 Marketing procedures

PRODUCT/INDUSTRY NAMES: 3573000 (Computers & Peripherals)  
SIC CODES: 3571 Electronic computers  
TICKER SYMBOLS: SUNW; ORCL  
FILE SEGMENT: CD File 275

FOR JOHN GAGE, chief science officer at **Sun Microsystems**, the future of computing will represent a break from the tangled wires emblematic of today's Internet...

...can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs--namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application **code** becomes **part** of the infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a Word **document** through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

COMPANY NAMES: **Sun Microsystems Inc.**...

15/5,K/3 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

06007655 Supplier Number: 53404096 (USE FORMAT 7 FOR FULLTEXT)  
**Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives ) (Industry Trend or Event)**  
Kingsley, Lawrence  
The Seybold Report on Internet Publishing, v3, n3, pNA(1)  
Nov, 1998  
ISSN: 1090-4808  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 1446  
PUBLISHER NAME: Seybold Publications, Inc.  
COMPANY NAMES: **Sun Microsystems Inc.; Oracle Corp.**  
EVENT NAMES: \*010 (Forecasts, trends, outlooks); 240 (Marketing procedures)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*3573000 (Computers & Peripherals)  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation); PUBL (Publishing)  
NAICS CODES: 334111 (Electronic Computer Manufacturing)  
TICKER SYMBOLS: SUNW; ORCL  
SPECIAL FEATURES: LOB; COMPANY

FOR JOHN GAGE, chief science officer at **Sun Microsystems**, the future of computing will represent a break from the tangled wires emblematic of today's Internet...

...can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs--namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application **code** becomes **part** of the infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a



Word document through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

COMPANY NAMES: **Sun Microsystems Inc.**; Oracle Corp.

15/5,K/4 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

05567137 Supplier Number: 48432007 (USE FORMAT 7 FOR FULLTEXT)

**Netscape Pours On The Code**

InternetWeek, p7

April 20, 1998

ISSN: 1096-9969

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 131

PUBLISHER NAME: CMP Media, Inc.

COMPANY NAMES: \*Netscape Communications Corp.

EVENT NAMES: \*330 (Product information)

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)

NAICS CODES: 51121 (Software Publishers)

TICKER SYMBOLS: NSCP

SPECIAL FEATURES: LOB; COMPANY

(USE FORMAT 7 FOR FULLTEXT)

**TEXT:**

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

...officials did not comment on a published report that it is in negotiations to be acquired by **Sun Microsystems**.

14/5,K/1 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01384564 00-35551

**\*\*USE FORMAT 9 FOR FULL TEXT\*\***

**Sending and receiving email attachments**

Notess, Greg R  
Online v21n2 PP: 85-87 Mar/Apr 1997 CODEN: ONLIDN ISSN: 0146-5422  
JRNL CODE: ONL  
DOC TYPE: Journal article LANGUAGE: English LENGTH: 3 Pages  
WORD COUNT: 2776

ABSTRACT: While email continues to consist almost completely of the functional, plain ASCII text, most email programs, known as mailers, can handle the transmission of more highly formatted and complex data. Ideally, sending information in an email message should be as simple as dragging and dropping another file into the message. Unfortunately, the reality is far more complex. Multiple variables can cause a wide range of problems, which is why use of attachments is still fairly rare. For those mailers which give encoding options, the 3 most common are MIME, uuencode, and BinHex. It is easy to send binary attachments, but knowing how to send them so that the intended recipient can properly view the files can be much more complex. The recipients have their share as well. Recipients need to understand the capabilities of their mailer software. Both Netscape's new Netscape Communicator suite and Microsoft's competing products will push the move towards more feature-rich email programs.

GEOGRAPHIC NAMES: US

DESCRIPTORS: Electronic mail systems; Data transmission; Technological change; Software packages; Product development; Problems

CLASSIFICATION CODES: 5250 (CN=Telecommunications systems); 8302 (CN=Software and computer services); 9190 (CN=United States); 7500 (CN=Product planning & development)

...TEXT: HTML ATTACHMENTS

In Netscape's Mail program, some attachments can be displayed inline. For example, send an **HTML document** as an inline attachment and Netscape Mail can display the **HTML document** just as the Web browser can. Sometimes, binary attachments of GIF or JPG images can be directly...

... success of the mail program's display is dependent on the way in which the attachment is **encoded** and marked.

**Part** of the MIME standard includes fields for Content Type and Content Disposition. Depending on how the sending...

14/5,K/2 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01155313 98-04708

**\*\*USE FORMAT 9 FOR FULL TEXT\*\***

**An electronic visit to the Department of Labor**

Krasowska, Francine  
Occupational Health & Safety v65n1 PP: 18 Jan 1996 ISSN: 0362-4064  
JRNL CODE: OHS  
DOC TYPE: Journal article LANGUAGE: English LENGTH: 1 Pages  
WORD COUNT: 808

ABSTRACT: Occupational safety professionals can find OSHA regulations and other data pertaining to the field by going online. If you have a modem and communication software on your computer, you can access the Department of Labor Bulletin Board at 202-291-4784. If you have an Internet account that

gives you access to the World Wide Web, you can check out the DOL and OSHA home pages. These are starting points in finding all kinds of interesting material. The text of the entire Code of Federal Regulations is available online.

COMPANY NAMES:

Department of Labor

OSHA

GEOGRAPHIC NAMES: US

DESCRIPTORS: Internet; Occupational safety; Federal regulation; Regulatory agencies

CLASSIFICATION CODES: 5250 (CN=Telecommunications systems); 4310 (CN=Regulation); 5340 (CN=Safety management); 9190 (CN=United States)

...TEXT: regulations, start at the OSHA home page--<http://www.osha.gov>--and proceed through "OSHA Standards & Related Documents" to the table of contents--[http://www.osha-slc.gov/OshStd\(underline\)toc/](http://www.osha-slc.gov/OshStd(underline)toc/) OSHA(underline)Std(underline)toc. **html**. Clicking on any entry on this page takes you to a specific **part** of the **code**. For instance, selecting Part 1926, Safety and Health Regulations for Construction, takes you to a listing of...

... dates of these interpretations are given, so you can see the evolution of the interpretation). An interpretation **document** may be a letter from an OSHA official answering an inquiry as to how they should comply...

14/5,K/3 (Item 1 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2003 CMP Media, LLC. All rts. reserv.

01185687 CMP ACCESSION NUMBER: WIN19990301S0011

**Web Browsers - Browsing A Revolution** (News Trends)

Scot Finnie

WINDOWS MAGAZINE, 1999, n 1003, PG36

PUBLICATION DATE: 990301

JOURNAL CODE: WIN LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: Windows News

WORD COUNT: 808

TEXT:

For a free product, Web browsers certainly make a lot of waves-and the tide is about to shift, yet again. Two big developments are likely to have a major impact on which browser you end up using and how future browsers will work: The pending merger between America Online and Netscape Communications, and the advent of Gecko, Netscape's new HTML-rendering engine.

COMPANY NAMES (DIALOG GENERATED): America Online ; Intuit ; Microsoft ; Netscape Communications ; Qualcomm

... model, the Gecko component- which includes a bare-bones browser program-measures just 1.6 MB. The **code** currently offers **partial** support for **HTML** 4.0; Netscape claims Communicator 5.0 will be complete in that regard. Gecko also supports level 1 of the **Document** Object Model (DOM) standard, which supports dynamic **HTML** and which developers use to create popular Web interfaces.

Gecko also supports Cascading Style Sheets 1 (CSS1...

14/5,K/4 (Item 2 from file: 647)

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2003 CMP Media, LLC. All rts. reserv.

01159069 CMP ACCESSION NUMBER: INW19980420S0004

**Netscape Pours On The Code** (This Just In...)

INTERNETWEEK, 1998, n 711, PG7  
PUBLICATION DATE: 980420  
JOURNAL CODE: INW LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: Table Of Contents  
WORD COUNT: 129  
TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be the earliest to expect a new version of a Navigator/Communicator 5.0 product. Meanwhile, Netscape officials did not comment on a published report that it is in negotiations to be acquired by Sun Microsystems.

COMPANY NAMES (DIALOG GENERATED): Netscape Communications; Sun Microsystems

TEXT:

Netscape Communications last week released more source code as part of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language (XML)** parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML**, Resource Description Format, **Cascading Style Sheets** and **HTML 4.0** technologies. Netscape expects work on Raptor to be completed this fall, so that would be...

14/5,K/5 (Item 1 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

02253199 SUPPLIER NUMBER: 53404096 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Gage, Ellison Share Visions of the Future at Internet World. (Sun, Oracle executives) (Industry Trend or Event)  
Kingsley, Lawrence  
Seybold Report on Internet Publishing, 3, 3, NA(1)  
Nov, 1998  
ISSN: 1090-4808 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 1547 LINE COUNT: 00124

COMPANY NAMES: Sun Microsystems Inc.--Officials and employees; Oracle Corp.--Officials and employees  
GEOGRAPHIC CODES/NAMES: 1USA United States  
DESCRIPTORS: Trade show report; Company executive  
NAMED PERSONS: Ellison, Lawrence J.--Addresses, essays, lectures; Gage, John--Addresses, essays, lectures; Joy, William N.--Addresses, essays, lectures  
EVENT CODES/NAMES: 010 Forecasts, trends, outlooks;240 Marketing procedures  
PRODUCT/INDUSTRY NAMES: 3573000 (Computers & Peripherals)  
SIC CODES: 3571 Electronic computers  
TICKER SYMBOLS: SUNW; ORCL  
FILE SEGMENT: CD File 275

... can drag and drop a PC file into the database. The file automatically will be parsed in **XML**, indexed and served anywhere where Oracle runs-namely, Unix, mainframes and PCs. A PC file thus can...

...linking of a file and database no longer requires 600 lines of code; instead, the server application code becomes part of the

infrastructure. All of the security, load-balancing and multimedia support of Oracle also come with iFS-fielded information can reside side-by-side with full text files in their native format, **HTML** and **XML** data, movie clips, sound files, E-mail, spreadsheets, etc. Oracle 8i thus becomes both a Internet file server and **document** repository. With 8i you can access a Word **document** through your browser, convert the Word file into **HTML**, forward any file with your comments, or route a file or directory as though it were a...

14/5,K/6 (Item 1 from file: 674)  
DIALOG(R)File 674:Computer News Fulltext  
(c) 2003 IDG Communications. All rts. reserv.

069958

#### **Web Standards**

#### **Netscape to support standards in next browser**

Byline: Sandra Gittlen

Journal: Network World

Publication Date: October 29, 1998

Word Count: 728 Line Count: 66

#### **Text:**

... standards developed by the World Wide Web Consortium - to which both companies belong. These include specifications for **cascading style sheets**, **XML**, **HTML** Ver. 4.0 and the emerging **Document Object Model**. Last month, WaSP, an Internet group of 5,000 developers, launched a public campaign to...

... balked, but after the protest picked up steam, it acquiesced and has slated its standards-based **NGLayout code** to be **part** of the browser. **NGLayout** reads **HTML**, **JavaScript** and other coding within a **document** and determines how to display the content in the browser. "Netscape's previous rendering engine had patchwork..."

... standards," says George Olson, project leader for the Web Standards Project. "But **NGLayout** is 100% compliant with **Cascading Style Sheets Level (CSS) 1** and the **Document Object Model (DOM) Level 1**." **CSS** allows developers to control the typography of many pages simultaneously and the **DOM** allows developers to manipulate...

... won't show up or scripting error messages." Olson said one site that tried to support dynamic **HTML**, a new browser feature that allows different users to view different versions of a page based on...

... write to." For instance, Netscape says the graphical user interface could vary, but how the browser renders **HTML** code should not. Because that type of cooperation is a little ways off, Byrunn says developers should...

... trying to reach a broad audience, then they should write using features most browsers support, such as **HTML 3.0**. But if the developers want to appeal to an audience with the latest and greatest in technology, then they should write to the most recent W3C standards such as **HTML 4.0** and **CSS 2.0**. "They should not, however, write to various proprietary tags and extensions put out by vendors..."

14/5,K/7 (Item 1 from file: 636)  
DIALOG(R)File 636:Gale Group Newsletter DB(TM)  
(c) 2003 The Gale Group. All rts. reserv.

04125758 Supplier Number: 54179409 (THIS IS THE FULLTEXT)

**CONTEMPORARY: Sheridan Software announces CodeAssist.**

M2 Presswire, pNA

March 22, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 510

TEXT:

M2 PRESSWIRE-22 March 1999-CONTEMPORARY: Sheridan Software announces CodeAssist (C)1994-99 M2 COMMUNICATIONS LTD

RDATE:220399

\* New code generator cuts data application development time

Contemporary plc, a key provider of information technology solutions for businesses of all sizes, announces CodeAssist from Sheridan Software Systems. This code generation software eliminates repetitive and time consuming steps from the hands-on part of the code development process using breakthrough, template-driven technology. It allows Visual Basic developers to create sophisticated data access routines faster and more efficiently. With CodeAssist, developers can produce robust, easily modifiable Visual Basic, HTML or SQL code. Current shipping date: 30 April 1999. Price: GBP 210 + VAT from Contemporary plc.

"CodeAssist is ideal for corporate developers and project managers involved in developing multi-tier or client/server applications, with databases on the back end, COM objects in the middle and a variety of front ends, including Visual Basic. This first release works with Microsoft Access and SQL Server and plans are already underway to release an additional version of CodeAssist that will include support for Oracle and Sybase databases," comments Adrian Handley, manager of Developer Solutions at Contemporary.

Highlights include:

\* More than 100 pre-built templates (including RDO, DAO, ADO, HTML and SQL) are provided for common code requirements for calling data objects from two-tier and multi-tier applications, as well as interactive browsers for accessing and manipulating databases, data objects and templates. Users can customise the pre-built templates or create their own templates as needed.

\* Developers writing in C++ or other languages where pre-built templates are not presently provided, can create their own individual templates utilising CodeAssist. Once these custom templates are created, CodeAssist ensures the same fast functionality, consistent quality, accurate replication and timesaving benefits of the included templates.

\* CodeAssist employs a familiar point-and-click database browser to pick database elements from any combination of tables and fields. These elements can then be coalesced into one or more reusable data object. The data object is then "passed through" the selected template generating the specific code desired by the developer.

\* One Button Code Generation and a simple interface reduces the learning curve so developers can quickly generate code for their applications.

\* CodeAssist gives users all the flexibility of using unbound controls with the same speed as using bound controls, by instantly generating the unbound data access code.

"Sheridan's CodeAssist helps kick start database programming with Visual Basic," summarises Tom Button, Microsoft director of marketing for developers tools.

About Contemporary: Contemporary plc (formerly Contemporary Software Ltd) delivers information technology solutions to businesses of all sizes. The company provides consultancy, training, system implementation, application development and technical support. Contemporary's Head Office is in Ascot, with a Technology Centre in Exeter and Training Centre in Windsor. For more information, visit <http://www.contemporary.co.uk>.

CONTACT: David Whitehead, Contemporary plc Tel: +44 (0)1344 873434 x 215 Fax: +44 (0)1344 872228 e-mail: [davidw@contemporary.co.uk](mailto:davidw@contemporary.co.uk) Jane Lee, Dexterity Tel: +44 (0)1273 487617 e-mail: [jane.lee@dexterity.co.uk](mailto:jane.lee@dexterity.co.uk)

\*M2 COMMUNICATIONS DISCLAIMS ALL LIABILITY FOR INFORMATION PROVIDED WITHIN M2 PRESSWIRE. DATA SUPPLIED BY NAMED PARTY/PARTIES.\*

COPYRIGHT 1999 M2 Communications

COPYRIGHT 1999 Gale Group

PUBLISHER NAME: M2 Communications

COMPANY NAMES: \*Contemporary PLC; Sheridan Software Systems Inc.

GEOGRAPHIC NAMES: \*1USA (United States); 4EUUK (United Kingdom)

PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); INTL (Business,

International)  
SIC CODES: 7372 (Prepackaged software)  
NAICS CODES: 51121 (Software Publishers)

... Sheridan Software Systems. This code generation software eliminates repetitive and time consuming steps from the hands-on **part** of the **code** development process using breakthrough, **template**-driven technology. It allows Visual Basic developers to create sophisticated data access routines faster and more efficiently. With CodeAssist, developers can produce robust, easily modifiable Visual Basic, **HTML** or SQL code. Current shipping date: 30 April 1999. Price: GBP 210 + VAT from Contemporary plc.  
"CodeAssist...

14/5,K/8 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

06149432 Supplier Number: 53936652 (USE FORMAT 7 FOR FULLTEXT)  
**Web Browsers -- Browsing A Revolution. (Internet/Web/Online Service Information)**  
Finnie, Scot  
Windows Magazine, p36(1)  
March 1, 1999  
ISSN: 1060-1066  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; General Trade  
Word Count: 810  
PUBLISHER NAME: CMP Publications, Inc.  
COMPANY NAMES: \*Netscape Communications Corp.; America Online Inc.  
EVENT NAMES: \*330 (Product information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*7372681 (Internet Access Software); 7372630 (Workgroup Software)  
INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation)  
NAICS CODES: 51121 (Software Publishers)  
TICKER SYMBOLS: NSCP; AOL  
TRADE NAMES: Netscape Communicator 5.0 (Workgroup software)  
SPECIAL FEATURES: COMPANY

... model, the Gecko component-which includes a bare-bones browser program-measures just 1.6 MB. The **code** currently offers **partial** support for **HTML** 4.0; Netscape claims Communicator 5.0 will be complete in that regard. Gecko also supports level 1 of the **Document** Object Model (DOM) standard, which supports dynamic **HTML** and which developers use to create popular Web interfaces.

Gecko also supports Cascading Style Sheets 1 (CSS1...

14/5,K/9 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2003 The Gale Group. All rts. reserv.

05567137 Supplier Number: 48432007 (USE FORMAT 7 FOR FULLTEXT)  
**Netscape Pours On The Code**  
InternetWeek, p7  
April 20, 1998  
ISSN: 1096-9969  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 131  
PUBLISHER NAME: CMP Media, Inc.  
COMPANY NAMES: \*Netscape Communications Corp.  
EVENT NAMES: \*330 (Product information)  
GEOGRAPHIC NAMES: \*1USA (United States)  
PRODUCT NAMES: \*7372000 (Computer Software)

INDUSTRY NAMES: BUSN (Any type of business); TELC (Telecommunications)  
NAICS CODES: 51121 (Software Publishers)  
TICKER SYMBOLS: NSCP  
SPECIAL FEATURES: LOB; COMPANY

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

Netscape Communications last week released more source **code** as **part** of its Mozilla project. Included was code for JavaScript 1.3, the latest version of the popular Web scripting language; a new **Extensible Markup Language** ( **XML** ) parser dubbed "expat," the first piece of outside code to be added to the Mozilla source tree; and a rendering engine dubbed Raptor, which will add layout support for **XML** , Resource Description Format, **Cascading Style Sheets** and **HTML** 4.0 technologies. Netscape expects work on Raptor to be completed this fall, so that would be...



| Set  | Items                               | Description                                                      |
|------|-------------------------------------|------------------------------------------------------------------|
| S1   | 4517                                | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -  |
|      |                                     | OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY  |
| S2   | 50337                               | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-   |
|      |                                     | RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML |
|      |                                     | OR VCML                                                          |
| S3   | 388734                              | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?           |
| S4   | 2604                                | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-    |
|      |                                     | PHER? OR ENCIPHER? OR ENCPYPER? OR CRYPT? OR CODE? ? OR CODED)   |
| S5   | 7627                                | SUN() MICROSYSTEMS                                               |
| S6   | 429260                              | S1 OR S2 OR S3                                                   |
| S7   | 79                                  | S6 AND S4                                                        |
| S8   | 0                                   | S7 AND S5                                                        |
| S9   | 845                                 | S6 AND S5                                                        |
| S10  | 5                                   | S1 AND S2 AND S3 AND S5                                          |
| S11  | 63                                  | S7 NOT PY>1999                                                   |
| S12  | 63                                  | S11 NOT PD>19991021                                              |
| S13  | 50                                  | RD (unique items)                                                |
| S14  | 0                                   | S7 AND S5                                                        |
| S15  | 2                                   | S10 NOT PY>1999                                                  |
| File | 8: Ei Compendex(R)                  | 1970-2003/Nov W5                                                 |
|      |                                     | (c) 2003 Elsevier Eng. Info. Inc.                                |
| File | 35: Dissertation Abs Online         | 1861-2003/Oct                                                    |
|      |                                     | (c) 2003 ProQuest Info&Learning                                  |
| File | 202: Info. Sci. & Tech. Abs.        | 1966-2003/Nov 17                                                 |
|      |                                     | (c) 2003 EBSCO Publishing                                        |
| File | 65: Inside Conferences              | 1993-2003/Dec W1                                                 |
|      |                                     | (c) 2003 BLDSC all rts. reserv.                                  |
| File | 2: INSPEC                           | 1969-2003/Nov W5                                                 |
|      |                                     | (c) 2003 Institution of Electrical Engineers                     |
| File | 233: Internet & Personal Comp. Abs. | 1981-2003/Jul                                                    |
|      |                                     | (c) 2003, EBSCO Pub.                                             |
| File | 94: JICST-EPlus                     | 1985-2003/Dec W1                                                 |
|      |                                     | (c) 2003 Japan Science and Tech Corp (JST)                       |
| File | 99: Wilson Appl. Sci & Tech Abs     | 1983-2003/Oct                                                    |
|      |                                     | (c) 2003 The HW Wilson Co.                                       |
| File | 95: TEME-Technology & Management    | 1989-2003/Nov W4                                                 |
|      |                                     | (c) 2003 FIZ TECHNIK                                             |
| File | 583: Gale Group Globalbase(TM)      | 1986-2002/Dec 13                                                 |
|      |                                     | (c) 2002 The Gale Group                                          |

15/5/1 (Item 1 from file: 233)  
DIALOG(R) File 233:Internet & Personal Comp. Abs.  
(c) 2003, EBSCO Pub. All rts. reserv.

00528679 99IE03-221

**Sun, Adobe offer cash for creativity, via XML development competitions**

Luh, James C; Caulfield, Brian

Internet World , March 15, 1999 , v5 n10 p45, 1 Page(s)

ISSN: 1081-3071

Company Name: Sun Microsystems ; Adobe Systems; IBM Corp.;

Arbortext

URL: <http://www.sun.com> <http://www.adobe.com> <http://www.alphaWorks.ibm.com/tech/xeena> <http://www.alphaWorks.ibm.com/tech/xml4j>

Product Name: Xeena; XML Parser for Java

Languages: English

Document Type: Articles, News & Columns

Geographic Location: United States

Reports on the proceedings of the Xtech '99 conference in San Jose, CA. Says that Sun Microsystems has launched a \$30,000 contest to build Extensible Style Language (XSL) ``formatting capability into Netscape's Mozilla open-source Web browser.'' Explains that XSL is a standard for processing Extensible Markup Language (XML) document structures. Notes that Sun and Adobe Systems have launched a \$60,000 contest to create a batch formatter in Java that produces Portable Document Format (PDF) docs from XML docs. Adds that the winners would exhibit their final work at the XML '99 conference at the end of the year. Says that the contest would enhance Mozilla's ability to compete with Microsoft Internet Explorer 5.0. Mentions other developments, including Sun's creation of standard extensions to Java for XML, IBM's release of Java-based XML editor called Xeena and XML Parser for Java upgrade, and Arbortext's Epic XML upgrade. Includes one sidebar. (MEM)

Descriptors: XML ; Standards; Contests; Web Browsers; Java; Conference; Product Development

Identifiers: Xeena; XML Parser for Java; Sun Microsystems ; Adobe Systems; IBM Corp.; Arbortext

15/5/2 (Item 2 from file: 233)  
DIALOG(R) File 233:Internet & Personal Comp. Abs.  
(c) 2003, EBSCO Pub. All rts. reserv.

00498376 98IT06-033

**Adobe submits proposal of Precision Graphics Markup Language (PGML) specification to W3C**

Information Today , June 1, 1998 , v15 n6 p41, 1 Page(s)

ISSN: 8755-6286

Company Name: Adobe Systems

URL: <http://www.w3.org/Submission> <http://www.adobe.com>

Product Name: PGML Specification

Languages: English

Document Type: Product Announcements

Geographic Location: United States

Announces that Adobe Systems Inc. has submitted to the World Wide Web Consortium a PGML specification for vector graphics developed in conjunction with IBM, Netscape, and Sun Microsystems. Reports that PGML provides precise control of layout, fonts, color, and printing, and produces graphics that are scalable and faster to download than bitmap images. Adds that it also brings the ability to support searchable text to graphics file formats. Says PGML is compatible with Document Object Model, Cascading Style Sheets, and eXtensible Markup Language, as well as all leading drawing and illustration programs, including Adobe Illustrator and CorelDRAW. Notes that end users of PGML Web content will benefit from faster downloads, resolution-independent printing, animation, and special effects, all without needing plug-ins. (JC)

Descriptors: Web Tools; Standards; Graphics

Identifiers: PGML Specification; Adobe Systems

13/5/1 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04312112 E.I. No: EIP95122967425

**Title: Enhancing the use of Eurocode No 8 through hypertext and expert system technology**

Author: Koumoussis, V.K.; Georgiou, P.C.; Gantes, C.J.; Dimou, C.K.

Corporate Source: Natl Technical Univ of Athens, Athens, Greece

Source: Advances in Engineering Software v 23 n 2 1995. p 69-81

Publication Year: 1995

CODEN: AESODT ISSN: 0965-9978

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review); T; (Theoretical)

Journal Announcement: 9602W3

**Abstract:** In this work, a general scheme is presented for the representation of Structural Design Codes in the form of **hypertext** and expert systems. This scheme is employed for Eurocode No 8, issued by the Commission of the European Communities, that contains the requirements for designing and erecting seismic-resistant structures. This code has, mainly, a complementary function to that of other Eurocodes that specify the requirements for the design of buildings made of different materials like concrete, steel, etc. There are many cross-references between Eurocode No 8 and the other Eurocodes, whereas Eurocode No 8 itself is divided into several parts that are strongly interrelated. The difficulty for the readers to grasp the overall structure and philosophy of the code, and establish the interconnection between its provisions is overcome by using the code in the form of a **hypertext** and expert system. The proposed scheme can be extended to incorporate the algorithmic **part** of the **code** following the logical approach. This concept can be implemented using Prolog language. The techniques employed herein can be generalized for other code-type **documents** and specifications. Moreover, such systems can be developed in parallel to the code **document** providing a valuable tool to expert committees. (Author abstract) 40 Refs.

**Descriptors:** \*Building codes; Structural design; Computer software; Expert systems; Earthquake resistance; Algorithms; PROLOG (programming language); Specifications; Software engineering; Data processing

**Identifiers:** **Hypertext** ; Structural code processing

**Classification Codes:**

723.4.1 (Expert Systems); 723.1.1 (Computer Programming Languages)

902.2 (Codes & Standards); 408.1 (Structural Design, General); 723.1 (Computer Programming); 723.4 (Artificial Intelligence); 484.3 (Earthquake Resistance)

902 (Engineering Graphics & Standards); 408 (Structural Design); 723 (Computer Software); 484 (Seismology)

90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 48 (ENGINEERING GEOLOGY)

13/5/2 (Item 2 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04278688 E.I. No: EIP95102904849

**Title: Temporal event analysis and program understanding**

Author: Howden, W.E.; Shi, G.M.

Corporate Source: Univ of Hawaii, Honolulu, HI, USA

Conference Title: Proceedings of the 19th Annual International Computer Software and Applications Conference COMPSAC '95

Conference Location: Dallas, TX, USA Conference Date: 19950809-19950811

Sponsor: IEEE

E.I. Conference No.: 43840

Source: Proceedings - IEEE Computer Society's International Computer Software & Applications Conference 1995. IEEE, Los Alamitos, CA, USA, 95CB35838. p 4-11

Publication Year: 1995

CODEN: PSICD2 ISSN: 0730-6512

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 9512W4

**Abstract:** A temporal event analysis approach to program understanding is described. Program understanding is viewed as a sequence of episodes in which the programmer concludes that an informal event occurs that corresponds to some **part** of the **code**. This can be viewed as accepting that the code is an adequate definition of the meaning of the informal event. Often, such a definition is contingent upon working hypotheses that describe other informal program properties that should be verified in order to confirm the validity of the understanding process. Verification of working hypotheses may depend on the formulation of additional definitions or working hypotheses. The understanding process can be assisted through the use of a **documentation** language for describing events and hypotheses, and an hypothesis verification tool. This paper describes a temporal event language in which hypotheses are formulated in terms of expected event sequences. An hypothesis verification tool was built, and experimentation was carried out on a set of programs. The tool was found to be very useful in understanding the detailed, control oriented aspects of a program. Program faults were discovered in every program that was analyzed, indicating that it facilitates a deep level of understanding. (Author abstract) 15 Refs.

**Descriptors:** Program **documentation**; Computer programming languages; Computer software selection and evaluation; Computer aided software engineering

**Identifiers:** Temporal event analysis; Program understanding; Hypothesis verification tool

**Classification Codes:**

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming)

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/3 (Item 3 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04241397 E.I. No: EIP95092839442

**Title:** Customized tools for software quality assurance and reengineering

**Author:** Wells, Charles H.; Brand, Russell; Markosian, Lawrence

**Corporate Source:** Electric Power Research Inst, Palo Alto, CA, USA

**Conference Title:** Proceedings of the 2nd Working Conference on Reverse Engineering

**Conference Location:** Toronto, Ont, Can **Conference Date:** 19950714-19950716

**Sponsor:** IEEE; ACM/SIGSOFT

**E.I. Conference No.:** 43484

**Source:** Reverse Engineering - Working Conference Proceedings 1995. IEEE, Los Alamitos, CA, USA, 95TB8101. p 71-77

**Publication Year:** 1995

**CODEN:** 002111

**Language:** English

**Document Type:** CA; (Conference Article) **Treatment:** A; (Applications)

**Journal Announcement:** 9510W5

**Abstract:** This paper describes a new approach to developing tools for measuring and **documenting** source code compliance with design and coding standards. It also presents preliminary results of applying this approach to software developed for the electrical utility industry. The approach is based on an enabling technology for software evaluation and reengineering. The key technical ideas underlying the technology are to represent source code in the form of abstract syntax trees in an object-oriented database, and to use a library of utilities to analyze software represented in this way. This enabling technology supports rapid implementation and testing of customized design and coding standards. The standards were defined by the Electric Power Research Institute (EPRI). We describe a prototype toolset

that we have used for measuring compliance of over 3 million lines of C and Fortran source code as part of evaluating legacy systems that are being reengineered, as well as for performing quality assurance of new applications. (Author abstract) 8 Refs.

Descriptors: \*Computer aided software engineering; Quality assurance; Codes (symbols); Computer software; Software engineering; Object oriented programming; Database systems; Program debugging; FORTRAN (programming language); COBOL (programming language)

Identifiers: Customized tools; Reengineering; Abstract syntax trees; Source code; Coding standards; Software evaluation; Software testing

Classification Codes:

723.1.1 (Computer Programming Languages)  
723.5 (Computer Applications); 913.3 (Quality Assurance & Control);  
723.1 (Computer Programming); 723.3 (Database Systems)  
723 (Computer Software); 913 (Production Planning & Control)  
72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

13/5/4 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04076975 E.I. No: EIP95022585330

Title: **Intelligent CNC cutting of sheet metal parts using machine vision**

Author: Allada, Venkat; Anand, Sam; Chu, Yean-Chu

Corporate Source: Univ of Cincinnati, Cincinnati, OH, USA

Source: International Journal of Industrial Engineering - Applications and Practice v 1 n 4 Dec 1994. p 305-314

Publication Year: 1994

CODEN: 001612 ISSN: 1072-4761

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications)

Journal Announcement: 9504W4

Abstract: The present study demonstrates the application of reverse engineering methods for cutting sheet metal parts from a stock sheet. The impetus for this study was the work done at a local sheet metal company which had switched from conventional mechanical press operations to CNC laser cutting operations. A user-friendly system, 'LAYCUT', (coded in Turbo Pascal, Borland C plus plus, and Auto Lisp) was developed for day-to-day use at the local company. The system is capable of automatically generating the stock-sheet layout and subsequently the NC-code. As an extension to 'LAYCUT', the system 'LAYCUT-II' was developed. 'LAYCUT-II' demonstrates the application of reverse engineering concepts in sheet metal operations. This system uses a simple machine vision system to acquire the image of a **template** part model. The image is then raster scanned and the boundary encoding performed. The Hough transform method is then used for detecting the vertices of the polygonal part. This geometric information (vertices) is used to automatically generate CAD models (in AutoCAD) and the DXF formatted files of the sheet metal parts. The DXF file is then used to drive the automated stock-sheet layout module and the automated **part NC-code** generation module. (Author abstract) 14 Refs.

Descriptors: \*Computer vision; Metal cutting; Sheet metal; Operations research; Automation; Computer software; Computer aided manufacturing; Mathematical transformations; Computer aided design

Identifiers: Reverse engineering methods; Mechanical press operations; Laser cutting operation; Machine vision; Hough transform; NC code generation

Classification Codes:

913.4.2 (Computer Aided Manufacturing)  
723.5 (Computer Applications); 531.1 (Metallurgy); 912.3 (Operations Research); 913.4 (Manufacturing); 921.3 (Mathematical Transformations)  
723 (Computer Software); 531 (Metallurgy & Metallography); 912 (Industrial Engineering & Management); 913 (Production Planning & Control); 921 (Applied Mathematics)  
72 (COMPUTERS & DATA PROCESSING); 53 (METALLURGICAL ENGINEERING); 91 (ENGINEERING MANAGEMENT); 92 (ENGINEERING MATHEMATICS)

13/5/5 (Item 5 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03800459. E.I. No: EIP94021216647

**Title: Synthesis of single-level circuits for microprogrammed automata from programmable logic arrays**

Author: Solov'ev, V.V.

Source: Avtomatika i Vychislitel'naya Tekhnika n 1 Jan-Feb 1993. p 14-20

Publication Year: 1993

CODEN: AVYTAK ISSN: 0132-4160

Language: Russian

Document Type: JA; (Journal Article) Treatment: A; (Applications)

Journal Announcement: 9404W1

Abstract: A method using programmable logic arrays (PLA) for the synthesis of single-level circuits for microprogrammed automata (MPA) whose behaviour is described in the language of algorithm graph diagrams is considered. The single-level circuit structure proposed allows to use efficiently the structural features of programmable logic arrays. For this purpose, the memory of the microprogrammed automata is implemented on the output PLA registers, and the internal feedback circuits of each PLA are used for analyzing part of the code of internal MPA states. As a result, the necessity to use external memory components is eliminated, and the total number of inputs and outputs in the system is increased. Estimates for the characteristics of the structure proposed are given in comparison with a similar PLA circuit. The method of synthesis is based on the decomposition of the MPA jump table and a special coding of internal MPA states. 5 Refs.

Descriptors: Microprogramming; Computer programming; Flowcharting; Automata theory; Formal logic; Algorithms; System program documentation

Identifiers: Automata circuits; Programmable logic arrays

Classification Codes:

721.3 (Computer Circuits); 723.1 (Computer Programming); 723.3 (Database Systems)

721 (Computer Circuits & Logic Elements); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/6 (Item 6 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03626433 E.I. No: EIP93050805460

**Title: CDA: A system for understanding the dynamic properties of data processing programs**

Author: Howden, William E.; Shi, Guangming

Corporate Source: Univ of California at San Diego, San Diego, CA, USA

Conference Title: Proceedings of the 1992 Symposium on Assessment of Quality Software Development Tools

Conference Location: New Orleans, LA, USA Conference Date: 19920527

Sponsor: IEEE Computer Soc; Tulane Univ

E.I. Conference No.: 17722

Source: Symposium on Assessment of Quality Software Development Tools Proc 92 Symp Assess Qual Software Dev Tools 1992. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. p 310-319

Publication Year: 1992

ISBN: 0-8186-2620-8

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications); G; (General Review)

Journal Announcement: 9306W4

Abstract: During software maintenance, it is of critical importance for maintenance staff to understand how a system works and when they make a change to part of the system, what effects this change will have on other parts of the system. It is our observation that much of the program understanding process revolves around dynamic properties such as the

states, state sequences and state transition operations. Hence, it is necessary to support the understanding process when the staff is reasoning about what could take place when the program is in operation and what could happen if **part** of the **code** is modified. CDA is a system for understanding the dynamic properties of large data processing programs. It allows the user to incrementally **document** their understanding of a program as working hypotheses and abstract operations with CDA comments. It then verifies these hypotheses to determine if they are justified. The justified hypotheses and abstract operations form an incremental specification of the program. Over time, the **documentation** improves in quality and completeness as new comments are added to justify and check the assumptions underlying new changes made to the code. (Author abstract) 3 Refs.

Descriptors: Computer aided software engineering; Computer systems programming; Computer software; Data processing; Computer programming; Program **documentation** ; COBOL (programming language); Maintenance; Programming theory

Identifiers: COBOL dynamics analyzer (CDA); Program understanding tool; Dynamic properties

Classification Codes:

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming); 723.2 (Data Processing)

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/7 (Item 7 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03576452 E.I. Monthly No: EIM9303-016565

**Title: Computer aided modeling of families and family members of designed parts.**

Author: Johannesson, H. L.

Corporate Source: Chalmers Univ of Technology, Goteborg, Sweden

Conference Title: 18th Annual ASME Design Automation Conference

Conference Location: Scottsdale, AZ, USA Conference Date: 19920913

Sponsor: ASME

E.I. Conference No.: 17560

Source: Advances in Design Automation - 1992 American Society of Mechanical Engineers, Design Engineering Division (Publication) DE v 44 pt 2. Publ by ASME, New York, NY, USA. p 173-179

Publication Year: 1992

CODEN: AMEDEH

Language: English

Document Type: PA; (Conference Paper) Treatment: T; (Theoretical)

Journal Announcement: 9303

**Abstract:** In the present paper a computer based method for modeling of families and family members of designed parts is suggested and presented. The product models that are built, contain 'rules' for generating geometric models of part members plus nongeometric information to be used when manufacturing the parts. The geometric design 'rules', that are stored in the part family data base, consist of normalized line and arc defining data to be used when generating geometry defining cross section part contours. These geometry defining data are generated automatically by the user when drawing contours in a CAD-system that is able to record the users actions, and generate the corresponding macro code. This code is interpreted by a part family storage program that stores both the interpreted geometric information, and user entered nongeometric information in the part family data base. When creating a part family member, the stored part family data, plus data defining interacting standard components, are retrieved from data bases. The nongeometric data are written on **document** files, and a 3-D solid geometric model of the part member is created in the used CAD-system by extruding and/or rotating part member and standard component interface geometry contours. (Author abstract) 18 Refs.

Descriptors: \*MECHANISMS; MACHINE DESIGN; MATHEMATICAL MODELS; COMPUTER SIMULATION; COMPUTER AIDED MANUFACTURING; COMPUTER AIDED DESIGN; CODES

(SYMBOLS)

Identifiers: MACRO CODE ; PART FAMILY STORAGE PROGRAM

Classification Codes:

601 (Mechanical Design); 921 (Applied Mathematics); 723 (Computer Software); 913 (Production Planning & Control)

60 (MECHANICAL ENGINEERING); 92 (ENGINEERING MATHEMATICS); 72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

13/5/8 (Item 8 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03361678 E.I. Monthly No: EI9201001273

**Title: Internally developed medical equipment management system. A viable alternative.**

Author: Lafrenaye, Raymond R.; Pezzullo, John C.

Corporate Source: Rhode Island Hospital, Providence, RI, USA

Source: Journal of Clinical Engineering v 16 n 4 Jul-Aug 1991 p 315-321

Publication Year: 1991

CODEN: JCEND7 ISSN: 0363-8855

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review); A; (Applications)

Journal Announcement: 9201

Abstract: A medical equipment management computer system, internally developed by Rhode Island Hospital, is presented. Hospital biomedical engineering departments must contend with ever-increasing regulatory requirements for patient-care equipment. Computerization is a viable solution to meeting the **documentation** standards dictated by healthcare governing bodies. Rhode Island Hospital's system consists of a Macintosh computer, Panorama database software, and Psion LZ64 Organizer handheld computer. Files were set up on equipment data, JCAHO-required historical **documentation**, service, inspections, **part codes** and locations, and vendor contact information. Technician inspection data recording time was reduced by approximately 30%. (Author abstract) 1 Ref.

Descriptors: \*BIOMEDICAL EQUIPMENT--Management; DATABASE SYSTEMS--Medical Applications; COMPUTER SOFTWARE

Identifiers: COMPUTERIZED EQUIPMENT MANAGEMENT; COMPUTERIZED RECORDS; SOFTWARE PACKAGE PANORAMA; MACINTOSH COMPUTER

Classification Codes:

462 (Medical Engineering & Equipment); 723 (Computer Software)

46 (BIOENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

13/5/9 (Item 9 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02783154 E.I. Monthly No: EI8909091244

**Title: ARMP-02 documentation . Part II. Chapter 1: Code summary.**

Author: Anon

Source: Electric Power Research Institute (Report) EPRI NP v PT2 n 4574-CCM Aug 1988 40p

Publication Year: 1988

CODEN: ERNPD6

Language: English

Document Type: RR; (Report Review) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8909

Abstract: An introduction to part II of the ARMP-02 system, this chapter abstracts from the other chapters contained in **part II: 12 code** manuals and associated neutron cross-section library descriptions. Implementation of the ARMP-02 system helps utilities model LWR cores for core follow, operations support, in-core fuel management, and preparation of databases for transient calculations. Part II of the ARMP-02 system required code manuals in standard three-volume format, as well as chapters on the



associated neutron cross-section libraries. After preparation of this **documentation**, a summary chapter was written to provide an overview of part II. (Edited author abstract)

Descriptors: \*NUCLEAR REACTORS, LIGHT WATER--\*Cores; COMPUTER SOFTWARE; DATABASE SYSTEMS; NUCLEAR FUELS--Management

Identifiers: REACTOR LATTICES; REACTOR PHYSICS; SOFTWARE PACKAGE ARMP-02

Classification Codes:

621 (Nuclear Reactors); 723 (Computer Software); 622 (Radioactive Materials)

62 (NUCLEAR TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING)

13/5/10 (Item 10 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02783152 E.I. Monthly No: EI8909091215

Title: **ARMP-02 documentation . Part II. Chapter 4: The EPRI-CPM data library.**

Author: Anon

Source: Electric Power Research Institute (Report) EPRI NP v PT2 n 4574-CCM Aug 1988 68p

Publication Year: 1988

CODEN: ERNPD6

Language: English

Document Type: RR; (Report Review) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8909

Abstract: The CPM-2 and MICBURN-E codes, part of the ARMP-02 system, use the same neutron cross-section library. These codes are generally used in tandem to model BWR assemblies for a variety of calculations essential to core follow, operations support, in-core fuel management, and preparation of databases for transient calculations. The EPRI-CPM library contains microscopic cross sections in 69 energy groups for 66 elements. Six library subfiles include group cross sections for different temperatures, resonance integrals for different potential scattering cross sections and temperatures, fission-product yields, and decay constants. This chapter describes library modifications and record structure and contains data tabulations. (Edited author abstract)

Descriptors: \*NUCLEAR REACTORS, BOILING WATER--\*Cores; COMPUTER SOFTWARE; DATABASE SYSTEMS; NUCLEAR FUELS--Management

Identifiers: REACTOR PHYSICS; REACTOR LATTICES; SOFTWARE PACKAGE ARMP-02

Classification Codes:

621 (Nuclear Reactors); 723 (Computer Software); 622 (Radioactive Materials)

62 (NUCLEAR TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING)

13/5/11 (Item 11 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02121308 E.I. Monthly No: EIM8609-064845

Title: **STANDARD HYDROMETEOROLOGICAL EXCHANGE FORMAT (SHEF) AND ITS APPLICATION IN THE PACIFIC NORTHWEST.**

Author: Pasteris, Phillip A.; Bissell, Vernon C.

Corporate Source: NOAA, NWS, Northwest River Forecast Cent, Portland, OR, USA

Conference Title: International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography, and Hydrology (Preprints of Papers).

Conference Location: Los Angeles, CA, USA Conference Date: 19850107

Sponsor: American Meteorological Soc, Boston, MA, USA; WMO, Geneva, Switz; Office of the Federal Coordinator for Meteorological Services & Supporting Research, Washington, DC, USA

E.I. Conference No.: 08280

Source: Publ by American Meteorological Soc, Boston, MA, USA p 9-13

Publication Year: 1985

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8609

Abstract: The Standard Hydrometeorological Exchange Format (SHEF) code is a major step in the modernization. The SHEF is simply a **documented** set of rules for coding of operational data in a form for both visual and computer recognition. It is specifically for day-to-day use, and is not designed for historical or archival data transfer. All the critical elements for identification of data are covered. Station identifiers (and perhaps location), parameter descriptors, time encoding conventions, unit and scale conventions, and comment fields are all **part** of the **code**. Design requirements of the SHEF include interagency sharing of data, visual and machine readability, and compatibility with anticipated receiving databases. The SHEF code is now being implemented by the U. S. National Weather Service nationwide for hydrological data exchange between NWS offices, and is already a foundation for several interagency data exchange agreements. 8 refs.

Descriptors: \*HYDROLOGY--\*Standards; DATA PROCESSING--Code Converters; CODES, SYMBOLIC--Standards

Identifiers: HYDROMETEOROLOGICAL EXCHANGE FORMAT; STANDARD FORMAT

Classification Codes:

444 (Water Resources); 471 (Marine Science & Oceanography); 902 (Engineering Graphics & Standards); 723 (Computer Software); 731 (Automatic Control Principles); 901 (Engineering Profession)  
44 (WATER & WATERWORKS ENGINEERING); 47 (OCEAN TECHNOLOGY); 90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

13/5/12 (Item 12 from file: 8)

DIALOG(R) File 8:EI Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02098786 E.I. Monthly No: EIM8606-040658

**Title: COMPUTER-AIDED SOLDERABILITY TESTING FOR RECEIVING INSPECTION.**

Author: Davy, J. Gordon; Skold, Randy

Corporate Source: Westinghouse Defense Cent, Baltimore, MD, USA

Conference Title: Proceedings of the Technical Conference - IEPS, Fourth Annual International Electronics Packaging Conference.

Conference Location: Baltimore, MD, USA Conference Date: 19841029

Sponsor: Int Electronics Packaging Soc, Glen Ellyn, IL, USA

E.I. Conference No.: 06732

Source: Publ by Int Electronics Packaging Soc, Glen Ellyn, IL, USA p 659-674

Publication Year: 1984

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8606

Abstract: The recent availability of a wetting balance which can be easily interfaced to a microcomputer has made possible a practical receiving inspection solderability test for component leads that avoids the subjectivity of the present dip-and-look test. The wetting balance, in effect, detects the size and shape of the solder meniscus on the lead. Since it is the solder meniscus more than the degree of coverage that is evaluated by inspectors of the completed solder joint, the wetting balance provides a more realistic test of how well the components will perform on the PWA. The software that has been developed for the wetting balance is designed to make it easy for inspection workers to perform the test with a minimum of training. It asks for identification of the **part**, manufacturer, date **code**, purchase order number, etc., so that the final results are adequately **documented**. Use of a computer to present the results means that the wetting force as a function of time can be plotted as a normalized curve (automatically accounting for differences in number and size of leads), and also that the results can be accumulated in a factory computer for statistical quality control. (Edited author abstract) 20 refs.

Descriptors: \*ELECTRONIC EQUIPMENT--\*Computer Applications; COMPUTERS, MICROCOMPUTER--Applications; SOLDERING--Computer Applications  
Identifiers: COMPUTER-AIDED SOLDERABILITY TESTING; RECEIVING INSPECTION; CAUSES OF POOR SOLDERABILITY; WETTING BALANCE TESTING; ACCELERATED AGING; ASSEMBLY FLOW DIAGRAM  
Classification Codes:  
716 (Radar, Radio & TV Electronic Equipment); 715 (General Electronic Equipment); 718 (Telephone & Line Communications); 723 (Computer Software); 722 (Computer Hardware); 538 (Welding & Bonding)  
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 53 (METALLURGICAL ENGINEERING)

13/5/13 (Item 13 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

01788728 E.I. Monthly No: EI8508070603 E.I. Yearly No: EI85091232  
**Title: AUTOMATED PROCESS DESIGN SYSTEM.**  
Author: Katsnel'son, A. I.  
Source: Sov Energy Technol n 5 1984 p 69-71  
Publication Year: 1984  
CODEN: SETEDW  
Language: ENGLISH  
Document Type: JA; (Journal Article) Treatment: X; (Experimental)  
Journal Announcement: 8508  
Abstract: An original automated system for developing blade machining processes is described. The system is suitable for parts of any configuration. The design process begins with the coding of information on the initial blank and the part. At this time, types and sizes previously used are given designations and determinations according to special rules. For parts which have already been in production, the **coded part** and initial blank information are entered into the computer. The computer then produces a set of technical **documentation**, at a rate of 20 operations per hour. The **documentation** set includes: a) a **document** list; b) a routing and operations chart; c) a ketch chart; and d) a tooling list.  
Descriptors: \*PROCESS CONTROL--\*Computer Applications; TURBOMACHINERY--Blades  
Identifiers: AUTOMATED PROCESS DESIGN  
Classification Codes:  
731 (Automatic Control Principles); 723 (Computer Software); 632 (Hydraulics & Pneumatics)  
73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 63 (FLUID DYNAMICS & VACUUM TECHNOLOGY)

13/5/14 (Item 14 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00581519 E.I. Monthly No: EI7611072842 E.I. Yearly No: EI76013567  
**Title: GENERATING AN INTERMEDIATE-CODE GENERATOR IN A COMPILER-WRITING SYSTEM.**  
Author: Ripken, Knut  
Corporate Source: Tech Univ, Munich, Ger  
Source: Int Comput Symp, Proc, Prepr, Antibes, Fr, Jun 2-4 1975 p 121-127. Publ by North-Holland Publ Co, Amsterdam, 1975. Available in US and Can from Am Elsevier Publ Co, New York, NY  
Publication Year: 1975  
Language: ENGLISH  
Journal Announcement: 7611  
Abstract: A formal description is presented for the first **part** of a **code** generator, which performs the translation of an attributed program tree into a program in an intermediate language. The description consists of code **templates** and the specification of an intermediate language, and can be used as an input to a compiler-writing system. One code **template** describes the translation of each operator at any node within the program

tree, as a function of the local environment only. 11 refs.

Descriptors: \*COMPUTER PROGRAMMING LANGUAGES; COMPUTER OPERATING SYSTEMS

Classification Codes:

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

13/5/15 (Item 15 from file: 8)

DIALOG(R) File 8: Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

00195735 E.I. Monthly No: EI71X161898

**Title: Definitions and values.**

Author: COMM, R. E. P.

Source: ASME, Performance Test Codes PTC 2 1971, 22 p

Publication Year: 1971

Language: ENGLISH

Journal Announcement: 71X1

Abstract: The purpose of this code is to provide the necessary information and data to comply with the mandatory requirement of PTC 1 that "all individual codes shall conform to the Code on Definitions and Values (PTC 2)". This code contains standards for terms, units, values of constants, symbols and technical nomenclature, which were applicable are to be component parts of all individual test codes. By necessity all the information contained in this **document** represents the state-of-the-art at the time of its preparation. In order that the Performance Test Codes may continue to be dynamic useful **documents**, any **part** of this **code** is automatically superseded by any or all of the following- % approval by ASME Council of new units, values of constants or fluid properties. Inclusion in the Performance Test Code series of equipment not covered by this code. Approval by the Standing Committee of an individual test code not conforming to this **document**. The exceptions described should be published in Mechanical Engineering as they occur, and this code should be amended as soon thereafter as practical.

Descriptors: \*TERMINOLOGY; BOILERS CODES; STANDARD; ENGINEERING--Units; STEAM TABLES AND CHARTS

Identifiers: ASME CODES

Classification Codes:

614 (Steam Power Plants); 641 (Heat & Thermodynamics); 902 (Engineering Graphics & Standards)

61 (PLANT & POWER ENGINEERING); 64 (HEAT & THERMODYNAMICS); 90 (GENERAL ENGINEERING)

13/5/16 (Item 1 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01790951 ORDER NO: AADAA-INQ55307

**Flux associations and their relationship to the underlying heterogeneous surface characteristics**

Author: Brown Mitic, Constance Maria

Degree: Ph.D.

Year: 1999

Corporate Source/Institution: McGill University (Canada) (0781)

Adviser: Peter Schuepp

Source: VOLUME 61/12-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 6517. 180 PAGES

Descriptors: PHYSICS, ATMOSPHERIC SCIENCE ; BIOLOGY, ECOLOGY ; ENVIRONMENTAL SCIENCES

Descriptor Codes: 0608; 0329; 0768

ISBN: 0-612-55307-8

This thesis consists of analysis of three different data sets:  
(i) Aircraft-based eddy correlation data collected above irrigated and non-irrigated agricultural land in Southern California during the California Ozone Deposition Experiment (CODE) summer 1991;

(ii) micrometeorological tower data, collected over grape and cotton canopies as **part** of **CODE**; (iii) aircraft-based eddy correlation flux data above two grid sites in the Canadian boreal forest during the Boreal Ecosystem-Atmosphere Study (BOREAS), spring and summer of 1994 and 1996.

Results from the **CODE** aircraft data **document** composition and size of the dominant structures, which transport heat and gases ( $H_2O$ ,  $CO_2$  and ozone) over water stressed and non-water stressed surfaces, and the relative frequency with which structures carrying only a single scalar, or given combinations of scalars, were encountered along the flight paths. Interpretation of results provides further evidence for the existence of a second (nonphysiological) sink for ozone. The relative preponderance of structures that carry moisture, carbon dioxide and ozone simultaneously, particularly in the gradient-up mode, reflects the importance of vegetation as co-located source/sink for these scalars. The detrending procedures described in this study may help to define a more effective separation between local and mesoscale events in biosphere-atmosphere interaction.

Results from the **CODE** tower data indicates a single vegetated ozone sink for the grape site, but a vegetated as well as a non-vegetated sink for the cotton site. For both sites, structures simultaneously transporting significant flux contributions of  $CO_2$ ,  $H_2O$ , heat and ozone dominate during unstable conditions. During stable conditions, unmixed single flux structures dominated over cotton but not over grape. The results of this study contribute empirical evidence about the relationship between ozone uptake and the physical and physiological state of vegetation, as well as the limitations placed on eddy scales in simulation models.

Results from the **BOREAS** aircraft data shows a decoupling between the surface and the atmosphere, where the patterns of vegetation, greenness and surface temperature may be quite dissimilar to those of the fluxes of sensible heat, latent heat and  $CO_2$ . Reasons for this lie in the extraordinary boundary layer conditions, high vapour pressure deficit, moist soil and hot canopies, and the response of the vegetation to these conditions. Analysis of the coherent structure compositions to some extent permits the characterization of the different sources and sinks. Overall, this study shows the importance of understanding the various interacting components of soil, vegetation and atmosphere when attempting to design process-based models for predictions in micrometeorologically complex ecosystems.

13/5/17 (Item 2 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01594074. ORDER NO: AADMM-18423

**BUILDING INSPECTION WITH AUTOMATED CODE COMPLIANCE CHECKING**

Author: NGUYEN, TANG-HUNG

Degree: M.SC.A.

Year: 1996

Corporate Source/Institution: CONCORDIA UNIVERSITY (CANADA) (0228)

Advisers: CLAUDE BEDARD; KINH HUY HA

Source: VOLUME 35/06 of MASTERS ABSTRACTS.

PAGE 1847. 149 PAGES

Descriptors: ENGINEERING, CIVIL ; ARCHITECTURE

Descriptor Codes: 0543; 0729

ISBN: 0-612-18423-4

The present research aims at developing an automated approach for the diagnostic of existing buildings during inspection. The proposed methodology is an intelligent system combining current computer technologies such as expert systems, databases, and **hypertext** techniques. The expert system represents and reasons with specialist knowledge to diagnose problems with code compliance checking whereas the database and **hypertext** techniques are efficient for handling cross references among

distinct building subsystems and disciplinary viewpoints in data management systems.

The development is characterized by two tasks: the establishment of a knowledge base consisting of building **code** requirements in **Part 3** of the National Building Code of Canada, and the incorporation of a data management module.

The research methodology has been implemented in a software prototype known as Health and Safety Expert System (HASES) The prototype system relies on knowledge and reasoning to interpret the requirements of Part 3 of the National Building Code of Canada. HASES aims at facilitating the inspection of existing buildings by simplifying the data collection and compliance checking processes, generating reports, and providing access to texts and relevant case studies on the fly, as an inspector walks around a building. (Abstract shortened by UMI.)

13/5/18 (Item 3 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01464563 ORDER NO: AADAA-IC469122

**DIE ABTEIKIRCHE NONNBERG IN SALZBURG**

Original Title: THE ABBEY-CHURCH NONNBERG OF SALZBURG (AUSTRIA)

Author: LANGTHALER, JOHANN

Degree: DR.PHIL.

Year: 1991

Corporate Source/Institution: UNIVERSITAET SALZBURG (AUSTRIA) (5806)

Source: VOLUME 57/01-C OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 37. 478 PAGES

Descriptors: RELIGION, HISTORY OF ; ART HISTORY ; ARCHITECTURE

Descriptor Codes: 0320; 0377; 0729

Language: GERMAN

The exploration of the abbey-church of Nonnberg refers only to the architecture of the church. The content of the dissertation is divided into 8 main parts: Part I: A historical survey of the activities of the building with extracts from the existing **documents**. Part II: The Gothic church and its most important phases of origin. Part III: The outfit of the church. Part IV: The ground-plan of the church and its crypt. The vault of the church. Part VI: Summary; Part VII: Appendage; Part VIII: Illustration-part. Part I describes the history of the church with important dates from the foundation of the abbey (713) to the 20th century with references to the existing **documents**. Part II describes the several phases in which the church was built. Part III is a short description of the outfit of the church. Part IV The ground-plan of the church and its crypt is explored in detail. A new ground-plan of the **crypt** was made. **Part V** The different vaults which exist in the church are explored and dated. Part VI is a summary of the dissertation which includes personal thoughts and results about this subject. Part VII is the appendage which includes a lot of **documents** (contracts...) In Part VIII are 133 illustrations on the subject.

Results. A new ground-plan of the crypt was made and the original Romanesque measuring unit was determined. The Romanesque rests of the church which burned 1423 could be determined. All parts of the church were dated. The portal was explored and compared to others in the environment of Salzburg.

13/5/19 (Item 4 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

(c) 2003 ProQuest Info&Learning. All rts. reserv.

01166971 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.

**THE JURIDICAL STATUS OF CATECHUMENS: A CANONICAL STUDY OF CHURCH DOCUMENTS SINCE VATICAN II, AND OF PREVIOUS DOCUMENTS OF AFRICAN CHURCHES**

Author: MUSIOL, JOZEF

Year: 1989  
Corporate Source/Institution: PONTIFICIA UNIVERSITAS GREGORIANA  
(VATICAN) (1049)  
Source: VOLUME 52/03-C OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 314. 476 PAGES  
Descriptors: RELIGION, GENERAL  
Descriptor Codes: 0318

The Second Vatican Council decided that the juridical status of catechumens should be clarified in the new code (cf. A.G. 14 c). The code, however, did not take a clear stand on this question. In canon 788 S 3, it stated: "the Episcopal conferences are responsible for establishing norms ... determining what should be done by catechumens and what should be their prerogatives". In this way, the task of clarification of the juridical status of catechumens was assigned to the Episcopal Conferences.

This task creates the need for deeper knowledge of the problems connected with the juridical status of catechumens. In fulfilling this, consideration should be given to the various elements of juridical status of catechumens already present in different Church documents. The conciliar and post-conciliar documents will be the main point of reference. However, the previous juridical experience of the mission catechumenates which proved so successful since the end of XIX century should also be recalled and taken into consideration.

This dissertation contributes to a better understanding of the juridical status of catechumens. It is an analytical study of the particular rights and duties of catechumens within the framework of catechumenate.

The work is divided into two parts, the first of which investigates the Council documents and conciliar debates, the Rite of Christian Initiation of Adults and the Code. The second part examines more than 50 documents of various African mission Churches which concern the rights and duties of catechumens prior to Council's acknowledgement of the catechumens' juridical status.

13/5/20 (Item 5 from file: 35)  
DIALOG(R) File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

01142445 ORDER NO: AADD--91053

**DECLARATIVE-CONFIGURABLE ESTIMATING SYSTEMS FOR THE CONSTRUCTION INDUSTRY**

Author: PANTOUVAKIS, JOHN-PARIS

Degree: PH.D.

Year: 1990

Corporate Source/Institution: UNIVERSITY OF NOTTINGHAM (UNITED KINGDOM)  
(0616)

Source: VOLUME 51/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 4502. 420 PAGES

Descriptors: ENGINEERING, CIVIL; COMPUTER SCIENCE

Descriptor Codes: 0543; 0984

Available from UMI in association with The British Library. Requires signed TDF.

The work presented in this thesis is about computer-aided estimating systems for the construction industry. A wide variety of such systems is now available, however, the diversity and complexity of individual practices has meant that many prospective users have been unable to find suitable software.

This thesis presents an innovative approach to the subject in which the development of an estimating system is based upon a set of software tools. These tools cater for the greater part of the code requirements of the system, thus, drastically reducing the development cost. In this context, certain modification capabilities are granted to the end-users (i.e. the estimators) (through the parsing of their requirements in a non-procedural (or declarative) manner), whereas more extensive modifications (or configurations) can be implemented prior to installation by professional programmers (due to the modular nature of the system and

the provision of detailed **documentation** and suitable software).

The approach employed by this thesis is characterized by the development of 'PRO.M.I.S.', a fully operational prototype declarative-configurable estimating system. The overall conclusion that can be drawn from this work is that this approach is valid for the particular context of construction estimating and, furthermore, it may lead to more functional, user-friendly and economical construction management computer systems in the future.

13/5/21 (Item 6 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.

835093 ORDER NO: AAD84-04926

**CHINESE COMMERCIAL LAW IN THE LATE CH'ING (1842-1911): JURISPRUDENCE AND THE DISPUTE RESOLUTION PROCESS IN TAIWAN**

Author: LIU, CHANG BIN

Degree: PH.D.

Year: 1983

Corporate Source/Institution: UNIVERSITY OF WASHINGTON (0250)

Source: VOLUME 44/11-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3472. 346 PAGES

Descriptors: LAW

Descriptor Codes: 0398

This dissertation is a study of Chinese commercial law and practice in the late Ch'ing era (1842 - 1911). Part I examines analogues of "commercial law" in Chinese and Western jurisprudence, the historical development of relevant Chinese legal concepts, and the institutional background. Special attention is paid to the administration of justice by local institutions and to the functioning of informal institutions, such as the guild, clan, and gentry.

For generations, Chinese commercial law has remained obscure to western analysis because of the preponderant penal nature of the traditional Chinese legal **codes**. Part II makes a detailed analysis of the main sources of commercial law including the Ch'ing code (Ta ch'ing lu li), clan and guild rules, and the customary law. Besides the Ch'ing code, the major types of materials used to analyze the Ch'ing private commercial law are the guild charters and the customs found in the Japanese compilation, Taiwan shiho (Private Law of Taiwan). Analysis focuses on provisions dealing with the following commercial transactions and problems: sales, redeemable sales (tien), loans and pawns, warranty, fair competition, and risk of loss. Special emphasis is placed on local customs and commercial practices in governing sales and redeemable sales.

Part III deals with the dispute resolution process in commercial matters. Using the extensive Tanshui-Hsinchu Archives (Tan-hsin tang an) as the major source, fundamental causes for legal problems and disputes arising out of agreements are discussed and statistical studies are made. The archives show us the following distinctive steps required in the dispute settlement process in Taiwan: petition; assignment of the case; magistrate's action; trial and fact finding; and judgment. At each step, the significant characteristics, legal **documents** and forms, and key personnel involved are described in detail. Statistics are gathered and used to support the argument.

Overall, this dissertation seeks to present a comprehensive picture of the Ch'ing commercial law in theory and practice.

13/5/22 (Item 1 from file: 202)  
DIALOG(R)File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

1203233

**Social services delivery information system for in-house services.**

Book Title: 1976 March 7. Maine Department Of Human Services, Augusta. 36



P. Ntis: Shr-0001073; Hc (a03), Mf (a01). See Isa 77-3490/m, 3336/n.  
Author(s): Maine Department Of Human Services  
Publication Date: 1976  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 1200

This manual, intended for users of the in-house service delivery information system of the maine department of human services, is provided. The **document** includes a flow chart of in-house service delivery, sample forms and related computer printouts, and appendixes containing a dictionary listing sample, a **partial** listing of **code** tables, and additional statistical information.

Classification Codes and Description: 6.09 (Management Information Systems and Decision Support)  
Main Heading: Information Systems and Applications

13/5/23 (Item 2 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

1002050  
**A semantic analysis of abstracts around an experiment in mechanized indexing.**  
Book Title: Ph. D. Dissertation, Universite De Liege. 1972. 562 P. Ref.  
Edrs: Ed 100 149; Hc \$27.00, Mf \$0.90, Plus Postage.  
Author(s): Noel, Jacques  
Publication Date: 1972  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 1000

The first part of this dissertation is a metatheoretical discussion of the needs and means of semantic analysis. This discussion includes sections on metalanguage, deep and surface structure and structural semantics, and procedures for relating the english of abstracting to a classification concordance in the same language. The second part describes the experiment, in which a mechanized indexing system was developed and applied to 50 abstracts from a bibliography on **documentation**. In this system, each text word or symbol is replaced by a code, after which the machine performs step-by-step concatenations, rewriting two or more codes as a single code, until each abstract is rewritten as a single **code**. **Part** three is a discussion of problems of semantic representation in: 1) theoretical background-constituent-structure rules, lexical entries, and conjunction, discourse, and relative clauses; 2) expressions such as "a discussion of..." and "this paper discusses..."; 3) conjunction, relative changes, and presupposition; 4) asymmetric conjunction-proposes an analysis in terms of case theory; and 5) examples drawn from the corpus that present difficulties for current case theory (for example, "as machines learn..."). The appendixes contain descriptors, sample abstracts, and other material used in this study. A 14-page bibliography concludes the work.

Classification Codes and Description: 4.04 (Abstracting, Reviewing)  
Main Heading: Information Recognition and Description

13/5/24 (Item 3 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0803178  
**Udc for mechanized information in viniti.**  
Book Title: In Molgaard-hansen, Rasmus, Ed.; Westring-nielsen, Margit, Ed.

Proceedings Of The Second Seminar On Udc And Mechanized Information Systems, Frankfurt, Germany, 1st-5th June 1970. 1971. Danmarks Tekniske Bibliotek, Copenhagen, Denmark. P. 131-132. 0 Ref. S  
Author(s): Popov, I V  
Corporate Source: Viniti, Moscow.  
Publication Date: 1970  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 0800

An automated information retrieval system for hydrometeorology has been developed, and its characteristics described. The system retrieves both **documents** and data. The retrieval is based on udc and a small specialized thesaurus of descriptors. **Document** indexing is performed to the maximum depth; on the average, one **document** has seven udc **codes**. **Partial** revision of udc 551.5 (meteorology. Climatology) is planned to improve retrieval. Other studies such as computer programming, microfilm displays, pattern recognition of information, and mechanized storage for **documents** are being conducted.

Classification Codes and Description: 4.07 (Classification, Indexing, and Thesauri)  
Main Heading: Information Recognition and Description

13/5/25 (Item 4 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0502684

**Inis: terminology and codes for countries and international organizations.**  
Book Title: Iaea-inis-5 (rev. 0). Director, Division Of Scientific And Technical Information, International Atomic Energy Agency, Karntnering 11, P.o. Box 590 A-1011 Vienna, Austria. 20 P. Mf \$0.65.  
Corporate Source: INTERNATIONAL ATOMIC ENERGY AGENCY; INTERNATIONAL NUCLEAR INFORMATION SYSTEM.  
Language: English  
Document Type: Book Chapter  
Record Type: Abstract  
Journal Announcement: 0500

Part i of this report lists, in english alphabetical order, the names of countries with a corresponding two-character alphabetic code, for use by national and regional information and **documentation** centers preparing input for inis. Part ii lists, in english alphabetical order, the names of organizations (usually international organizations) with a corresponding two-character alphabetic **code**. **Part** . Iii list, in english alphabetical the codes for countries and organizations.

Classification Codes and Description: 4.07 (Classification, Indexing, and Thesauri)  
Main Heading: Information Recognition and Description

13/5/26 (Item 5 from file: 202)  
DIALOG(R) File 202:Info. Sci. & Tech. Abs.  
(c) 2003 EBSCO Publishing. All rts. reserv.

0100349

**Systems of data and literature retrieval in spectroscopy.**  
Author(s): Kaiser, H  
Corporate Source: Institut Fuer Spektrochemie Und Angewandte Spektroskopie, Dortmund, Germany  
Hilger Journal vol. 9, no. 4, pages 64-73  
Publication Date: November 1965  
Language: English

Document Type: Journal Article  
Record Type: Abstract  
Journal Announcement: 0100

The dms ( **documentation** of molecular spectroscopy) system developed by the german institute for basic and applied spectroscopy is described. It is based on the use of inverted file, concept coordination, optical coincidence cards in conjunction with a two- **part code** by which all important concepts in this special discipline are expressed in terms of a relatively small vocabulary (152 "words") represented by three-digit numbers. An outline of the code is included. Computer techniques are used to produce both junior indexes to each issue of a current literature list, as well as the dms general index, from the punched optical coincidence cards.

Classification Codes and Description: 6.03 (Abstracting, Indexing, and Review Services)  
Main Heading: Information Systems and Applications

13/5/27 (Item 1 from file: 2)  
DIALOG(R) File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

6195172 INSPEC Abstract Number: B1999-04-6135C-167, C1999-04-6130D-016  
**Title:** Document **image compression using straight line extraction and block context model**

**Author(s):** Hwayong Joung; Wong, E.K.; Yu Chen; Kim, S.P.  
**Author Affiliation:** Dept. of Comput. Sci., Polytech. Univ., Brooklyn, NY, USA

**Conference Title:** Proceedings 1998 International Conference on Image Processing. ICIP98 (Cat. No.98CB36269) Part vol.1 p.530-4 vol.1

**Publisher:** IEEE Comput. Soc, Los Alamitos, CA, USA

**Publication Date:** 1998 **Country of Publication:** USA 3 vol. (lxxi+962+984+1013) pp.

**ISBN:** 0 8186 8821 1 **Material Identity Number:** XX-1998-01745

**U.S. Copyright Clearance Center Code:** 0 8186 8821 1/98/\$10.00

**Conference Title:** Proceedings of IPCIP'98 International Conference on Image Processing

**Conference Sponsor:** IEEE Signal Process. Soc

**Conference Date:** 4-7 Oct. 1998 **Conference Location:** Chicago, IL, USA

**Language:** English **Document Type:** Conference Paper (PA)

**Treatment:** Theoretical (T)

**Abstract:** We present a new lossy technique for **document** image compression by using straight line extraction and a block context model. Straight line segments are extracted from a binary **document** image and subtracted from the original image. Their endpoint coordinates and width can then be efficiently **coded**. The remaining **part** of the image, which mainly contains text and other symbols, is coded using a high-order block context model (HOBCEM) based on vector quantization (VQ). The proposed method is particularly effective for **document** images containing a large number of straight line segments, such as engineering or architectural drawings. It achieves much higher compression than conventional lossless techniques, such as the JBIG and CCITT G3 and G4 standards, with little loss of visual quality. In the experiments we carried out, a group of engineering drawings digitized at 200 dpi, compression ratios ranging from 30 to 70 were obtained. (6 Refs)

**Subfile:** B C

**Descriptors:** **document** image processing; edge detection; feature extraction; image coding; vector quantisation

**Identifiers:** **document** image compression; straight line extraction; block context model; lossy technique; binary **document** image; endpoint coordinates; width; high-order block context model; HOBCEM; vector quantization; VQ; engineering drawings; architectural drawings; compression ; visual quality; compression ratios

**Class Codes:** B6135C (Image and video coding); B6135E (Image recognition); C6130D (Document processing techniques); C5260B (Computer vision and image

processing techniques); C1260S (Signal processing theory); C1250M (Image recognition)

Copyright 1999, IEE

13/5/28 (Item 2 from file: 2)  
DIALOG(R) File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

5946412 INSPEC Abstract Number: C9807-6140D-051

**Title: Proceedings of the 1998 International Conference on Computer Languages (Cat. No.98CB36225)**

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1998 Country of Publication: USA x+282 pp.

ISBN: 0 8186 8454 2 Material Identity Number: XX98-01333

U.S. Copyright Clearance Center Code: 98/\$10.00

Conference Title: Proceedings of the 1998 International Conference on Computer Languages (Cat. No.98CB36225)

Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Comput. Languages; ACM SIGPLAN

Conference Date: 14-16 May 1998 Conference Location: Chicago, IL, USA

Language: English Document Type: Conference Proceedings (CP)

Abstract: The following topics were dealt with: computer languages; security and dynamic class loading in Java; transactions for Java; breaking abstractions and unstructuring data structures; reflexivity for CORBA interfacing; reactive programming in Standard ML; Triveni process-algebraic API; distributed computation; microarchitecture simulators; microprocessor specification in Hawk; **template** and multiple inheritance approach to attribute grammars; functional and object-oriented programming methodologies; modular compilers; automatic **template** -based run-time specialization; self-applicable on-line partial evaluation; parallelization via context preservation; syntactic control of interference; probabilistic concurrent constraint programming; destructive array update optimization; deterministic logic program evaluation; dependence analysis for recursive data; optimal **code** motion; **partial** redundancy elimination; profile-driven dynamic recompilation; formal callability; aggregate array computation; and data flow analysis.

Subfile: C

Descriptors: data flow analysis; data structures; high level languages; program compilers; programming

Identifiers: computer languages; Java security; Java dynamic class loading; Java transactions; abstraction breaking; unstructured data structures; CORBA interfacing; Standard ML reactive programming; Triveni process-algebraic API; distributed computation; microarchitecture simulators; microprocessor specification; attribute grammars; functional programming; object-oriented programming; modular compilers; automatic **template** -based run-time specialization; self-applicable on-line partial evaluation; parallelization; context preservation; syntactic interference control; probabilistic concurrent constraint programming; destructive array update optimization; deterministic logic program evaluation; dependence analysis; recursive data; optimal code motion; partial redundancy elimination; profile-driven dynamic recompilation; formal callability; aggregate array computation; data flow analysis

Class Codes: C6140D (High level languages); C6120 (File organisation); C6110 (Systems analysis and programming); C6150 (Systems software)

Copyright 1998, IEE

13/5/29 (Item 3 from file: 2)  
DIALOG(R) File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

5704685 INSPEC Abstract Number: C9711-5260B-142

**Title: Handwritten ZIP code recognition**

Author(s): Dzuba, G.; Filatov, A.; Volgunin, A.

Author Affiliation: Parascript, Boulder, CO, USA

Conference Title: Proceedings of the Fourth International Conference on

Document Analysis and Recognition (Cat. No.97TB100138) Part vol.2 p.  
766-70 vol.2

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1997 Country of Publication: USA 2 vol. xxiv+1119  
pp.

ISBN: 0 8186 7898 4 Material Identity Number: XX97-02265

U.S. Copyright Clearance Center Code: 0 8186 7898 4/97/\$10.00

Conference Title: Proceedings of the Fourth International Conference on  
Document Analysis and Recognition

Conference Sponsor: Int. Assoc. Pattern Recognition (IAPR), TC 10 & 11;  
Int. Graphonomics Soc. (IGS); German Assoc. Comput. Sci. (GI); German  
Assoc. Inf. Technol. (ITG)

Conference Date: 18-20 Aug. 1997 Conference Location: Ulm, Germany

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P); Experimental (X)

Abstract: The encoding of delivery point code (DPC) for a handwritten  
address is one of the most complex problems of the US mail delivery  
automation. This paper describes a real-time system intended to recognize  
the 5-digit ZIP **code part** of DPC. To increase the system performance  
the results of ZIP code recognition are cross-validated with those of city  
and state name recognition. The main principles of the handwritten word  
recognizer which provide the core of the system are explained. The system  
throughput is 40,000 address blocks per hour. Experimental results on live  
mail pieces are presented. The ZIP code recognition rate is 73% with 1%  
error rate. (4 Refs)

Subfile: C

Descriptors: **document** image processing; handwriting recognition;  
mailing systems; optical character recognition; performance evaluation;  
postal services; real-time systems

Identifiers: handwritten ZIP code recognition; delivery point code;  
handwritten address; US mail delivery automation; real-time system; system  
performance; state name recognition; city name recognition; handwritten  
word recognizer; system throughput; mail pieces; error rate

Class Codes: C5260B (Computer vision and image processing techniques);  
C1250B (Character recognition); C6130D (Document processing techniques);  
C7185 (Administration of other service industries); C7104 (Office  
automation)

Copyright 1997, IEE

13/5/30 (Item 4 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

4950978 INSPEC Abstract Number: C9506-5260B-269

**Title: Recognition of handprinted digits using optimal bounded error  
matching**

Author(s): Breul, T.M.

Author Affiliation: IDIAP, Martigny, Switzerland  
p.493-6

Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA

Publication Date: 1993 Country of Publication: USA xx+963 pp.

ISBN: 0 8186 4960 7

U.S. Copyright Clearance Center Code: 0 8186 4960 7/93/\$3.00

Conference Title: Proceedings of 2nd International Conference on Document  
Analysis and Recognition (ICDAR '93)

Conference Sponsor: IAPR TC-11 & TC-10; IEEE Comput. Soc. & IGS

Conference Date: 20-22 Oct. 1993 Conference Location: Tsukuba Science  
City, Japan

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: A system for recognizing handprinted digits using optimal  
bounded error matching is described. Bounded error matching is already in  
common use in general-purpose 2D and 3D visual object recognition and can  
cope with clutter, occlusions, and noise, important issues also in OCR. The  
results presented demonstrate that the same techniques achieve high  
recognition rates (up to 99.2%) on a real-world handprinted digit

recognition task (the NIST database of hand-printed census forms and the CEDAR database of digits extracted from US mail ZIP codes). As part of the system, a post-processing step for k-nearest neighbor classifiers based on decision trees is described that can be used (in place of the usual heuristic methods) for setting thresholds and that improves recognition rates significantly. (15 Refs)

Subfile: C

Descriptors: character recognition; document handling; handwriting recognition; optical character recognition; trees (mathematics); visual databases

Identifiers: bounded error matching; digit recognition; handprinted digits; optimal bounded error matching; 3D visual object recognition; OCR; recognition rates; real-world handprinted digit recognition task; NIST database; hand-printed census forms; CEDAR database; US mail ZIP codes; post-processing step; k-nearest neighbor classifiers; decision trees; heuristic methods

Class Codes: C5260B (Computer vision and image processing techniques); C6130D (Document processing techniques); C6160S (Spatial and pictorial databases); C1160 (Combinatorial mathematics)

Copyright 1995, IEE

13/5/31 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

4946225 INSPEC Abstract Number: C9506-6130S-041

Title: Virus detection using a generalised virus description language

Author(s): Coates, G.; Leigh, D.

Author Affiliation: Sch. of Comput., Staffordshire Univ., Beaconside, UK p.83-96

Publisher: Virus Bulletin, Oxford, UK.

Publication Date: 1994 Country of Publication: UK xxii+194 pp.

Conference Title: Proceedings of Virus Bulletin International Conference

Conference Date: 8-9 Sept. 1994 Conference Location: Jersey, UK

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: This paper discusses the requirements and implementation of a generalised virus detector. It is irrelevant to the detector whether the virus code forms part of an existing file or takes up the whole of such a file. To detect such viruses so that they may be eradicated is an important aspect of computer systems maintenance. Where multiple infection has taken place, this may be an extensive and expensive activity. The approach to the production of much virus-detection software is bottom-up, relying on the hand-crafting of virus-recognition components which are then embedded into an enabling framework. The alternative approach, which is described here (top-down implementation), aims to develop a framework in which virus detection elements may operate. This provides a stable environment not only for implementation itself, but also for the continuing development of specialised components. The virus definition patterns are described using a simple, mainly context-free language, where the description is used directly to build an intermediate structure used in the detection operations. The parsing which leads to this intermediate structure is described, including the checking operations to establish validity of the virus description. The advantages and mechanisms of a flexible detection approach are further discussed. The use of the intermediate structure as a template for pattern matching is illustrated. The alternative approaches for multiple files are evaluated. Examples of the results achieved in real environments are given. (15 Refs)

Subfile: C

Descriptors: computer viruses; context-free languages; program diagnostics; specification languages

Identifiers: virus detection; generalised virus description language; stand-alone virus files; worms; computer systems maintenance; multiple infection; virus-detection software; virus definition patterns; context-free language; parsing; pattern matching; multiple viruses

Class Codes: C6130S (Data security); C6150G (Diagnostic, testing,

debugging and evaluating systems); C4210L (Formal languages and computational linguistics)

Copyright 1995, IEE

13/5/32 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03668006 INSPEC Abstract Number: C90046755

**Title: A programming style**

Author(s): Haydon, G.B.

Author Affiliation: WISC Technol. Inc., La Honda, CA, USA

Conference Title: 1989 Rochester Forth Conference. Industrial Automation p.72-3

Publisher: Inst. Appl. Forth Res, Rochester, NY, USA

Publication Date: 1989 Country of Publication: USA vii+143 pp.

ISBN: 0 914593 09 9

Conference Date: 20-24 June 1989 Conference Location: Rochester, NY, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The key to good programming is clear thinking. Source code should be written in good narrative English. It should start with the program specifications. Programming is then the process of refining the thinking which enlarges the specifications into a **template** for the program's structure before adding the **code** implementation. As **part** of the narrative, test vectors and comments on the algorithms should be included with each structure. Let the computer find the code. Its ego will not suffer. There are as many different styles of computer programming as there are programmers' and then some. In most cases, no style is even considered. The goal is to get the job done and move on. (0 Refs)

Subfile: C

Descriptors: FORTH; programming

Identifiers: source code; Forth; program structure **template** ; programming style; clear thinking; narrative English; program specifications; code implementation; test vectors; comments; algorithms

Class Codes: C6110 (Systems analysis and programming)

13/5/33 (Item 7 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03593929 INSPEC Abstract Number: C90027138

**Title: Rewritable optical disk subsystem 112 series**

Author(s): Kushizaki, O.; Shigematsu, K.

Author Affiliation: Hitachi Ltd., Odawara, Japan

Journal: Hitachi Review vol.38, no.5 p.253-6

Publication Date: Oct. 1989 Country of Publication: Japan

CODEN: HITAAQ ISSN: 0018-277X

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Product Review (R)

Abstract: Optical disks for computer file memory have entered a new generation with newly developed rewritable technology. The write once optical disk has been popularly used for **document** files, image files, and as a **part** of **coded** data files because of its compact, large storage capacity and easy handling with removable media. The newly developed 5.25-inch rewritable optical disk subsystems, the OD112 and OL112 Series, incorporate erase and rewritable functions with magneto optical technology. The main applications for rewritable optical disk subsystems are as online data files, back-up files and image files. (2 Refs)

Subfile: C

Descriptors: optical disc storage

Identifiers: Hitachi; optical disk subsystem; 112 series; rewritable optical disk; OD112; OL112; 5.25 inch

Class Codes: C5320K (Optical storage)

Numerical Indexing: size 1.33E-01 m

13/5/34 (Item 8 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03514040 INSPEC Abstract Number: C90002744

**Title: A compiler and workbench for precise specification development**

Author(s): Warren, J.H.

Conference Title: Second International Conference on Software Engineering for Real Time Systems (Conf. Publ. no.309) p.55-9

Publisher: IEE, London, UK

Publication Date: 1989 Country of Publication: UK xii+287 pp.

Conference Date: 18-20 Sept. 1989 Conference Location: Cirencester, UK

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: An overview is given of a system for specification development as well as the method and the tools that support it. The objectives of the system are to produce specifications which are: clear, consistent, complete and totally unambiguous; support mathematical reasoning; and lead to the production of relevant **documentation** and the automatic generation of application code. The system addresses requirements expression. It comprises a language and a set of tools for manipulating statements in the language. The system toolset is rule-based with a mathematical foundation in predicate calculus and relational algebra. It is susceptible to mathematical reasoning and it is applicable to a wide range of problem areas. Tools available include a (syntax directed) editor, compiler, animator, a preliminary symbolic manipulator and a **partial code generator**. Additional tools under development include a configuration manager, an extended code generator and some preliminary mathematical reasoning tools. (3 Refs)

Subfile: C

Descriptors: application generators; expert systems; formal specification ; program compilers; software tools; specification languages

Identifiers: workbench; precise specification development; specification development; unambiguous; mathematical reasoning; relevant **documentation** ; application code; requirements expression; system toolset; rule-based; mathematical foundation; predicate calculus; relational algebra; syntax directed; editor; compiler; animator; preliminary symbolic manipulator; **partial code generator**

Class Codes: C6115 (Programming support); C6110B (Software engineering techniques); C6170 (Expert systems); C6140D (High level languages); C6150C (Compilers, interpreters and other processors)

13/5/35 (Item 9 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02354796 INSPEC Abstract Number: C85002643

**Title: Software engineering for user interfaces**

Author(s): Draper, S.W.; Norman, D.A.

Author Affiliation: Inst. for Cognitive Sci., Univ. of California at San Diego, La Jolla, CA, USA

Conference Title: Proceedings of the 7th International Conference on Software Engineering (cat. no. 84CH2011-5) p.214-20

Publisher: IEEE, New York, NY, USA

Publication Date: 1984 Country of Publication: USA xiv+545 pp.

ISBN: 0 8186 0528 6

U.S. Copyright Clearance Center Code: 0270-5257/84/0000-0214\$01.00

Conference Sponsor: IEEE; ACM; NBS

Conference Date: 26-29 March 1984 Conference Location: Orlando, FL, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The authors consider the extension of software engineering to



deal with the issues raised by the design of human-machine interfaces. He discusses the goals in optimizing an interface; the state of interface design; the effect of the interface on **code** ; **documentation** as **part** of the interface; and interface debugging and testing. (21 Refs)

Subfile: C

Descriptors: human factors; interactive systems; software engineering

Identifiers: human factors; user interfaces; software engineering;  
human-machine interfaces; **documentation** ; interface debugging; testing

Class Codes: C6110 (Systems analysis and programming)

13/5/36 (Item 10 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02286981 INSPEC Abstract Number: C84034753

**Title: Using comments to aid program maintenance**

Author(s): Thomas, R.A.

Journal: BYTE vol.9, no.5 p.415-22

Publication Date: May 1984 Country of Publication: USA

CODEN: BYTEDJ ISSN: 0360-5280

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Complex software can be maintained more easily by the judicious use of remarks embedded within program **code** . Comments are **part** of the internal **documentation** written for the programmer, as differentiated from the end-user's manual. Even so they rarely contain all the information necessary for maintaining a program. The need for a systematisation of comments is stressed. COBOL is not a completely successful attempt at making a language self- **documenting** . (12 Refs)

Subfile: C

Descriptors: programming

Identifiers: remarks; internal **documentation** ; systematisation; comments  
; COBOL; self- **documenting**

Class Codes: C6110 (Systems analysis and programming)

13/5/37 (Item 11 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02047152 INSPEC Abstract Number: C83021845

**Title: Programs as data for their help systems**

Author(s): Rich, E.A.

Author Affiliation: Univ. of Texas, Austin, TX, USA

Conference Title: AFIPS Conference Proceedings. Vol.51. 1982 National Computer Conference p.481-5

Editor(s): Morgan, H.L.

Publisher: AFIPS Press, Arlington, VA, USA

Publication Date: 1982 Country of Publication: USA xi+843 pp.

Conference Date: 7-10 June 1982 Conference Location: Houston, TX, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: The goal of this research is to develop ways of representing the knowledge available to a help system in such a way that the system can actually reason with the knowledge rather than being restricted to simply retrieving and presenting stored answers to a restricted and anticipated class of questions. One kind of information that is useful to such an intelligent help system is knowledge of how the underlying system operates. This knowledge is contained in the code for the system. By exploiting system **code** as **part** of the help database, many problems of inconsistency between programs and their **documentation** can be avoided. In initial investigations of this problem, the author represents the system code as a set of productions that are easier to manipulate than is code in most standard languages. As she develops techniques for answering questions by reasoning with knowledge about the system, she becomes increasingly able to answer the growing variety of questions that will occur as the language

interface to a help system becomes more flexible. (2 Refs)

Subfile: C

Descriptors: database management systems; management information systems

Identifiers: DBMS; MIS; help systems; knowledge; system code; help  
database

Class Codes: C6160 (Database management systems (DBMS)); C7100 (Business and administration)

13/5/38 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2003, EBSCO Pub. All rts. reserv.

00039588. 8236205

**Mapping machine language code , resource: part II**

Berger, T.R.

Compute! , Sep 1982 , v4 n9 p175-183, 7 pages

ISSN: 0194-357X

Languages: English

Document Type: Article

Program Listing in BASIC

Geographic Location: United States

Presents a series of OSI BASIC programs which can be used to help the user produce annotated disassemblies of machine language programs. Includes the following tables: keyword action addresses, memory table, Zpage table and JMP table.

Descriptors: OSI; \*Machine Language; \* Documentation

13/5/39 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

(c) 2003, EBSCO Pub. All rts. reserv.

00038180. 8225205

**Mapping machine language code : resource part I**

Berger, T.R.

Compute! , Jul 1982 , v4 n7 p175-182, 8 pages

ISSN: 0194-357X

Languages: English

Document Type: Article

Program Listing in BASIC and Assembly Language

Geographic Location: United States

Describes a group of programs that can be used to facilitate the regeneration of fully **documented** assembler source listings starting from machine language programs. Written for OSI computers but can be modified for other 6502 computers.

Descriptors: **Documentation** ; \*OSI; \*Machine Language; \*Disassembler

13/5/40 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03518375. JICST ACCESSION NUMBER: 98A0294673 FILE SEGMENT: JICST-E

**Multi-Information Partial - Encryption System.**

OKANO HIROKAZU (1); UNE HIROYUKI (1); SUIZU HISAO (2); (2)

Babuhitachinishisofutowea

Hiroshima Denki Daigaku, Hiroshima Jidosha Kogyo Tanki Daigaku Kenkyu

Hokoku(Memoirs of the Hiroshima-Denki Institute of Technology and the

Hiroshima Junior College of Automotive Engineering), 1997, VOL.30,

PAGE.69-74, FIG.7, REF.6

JOURNAL NUMBER: Z0846AAR ISSN NO: 0286-0562

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02-759 621.391.037.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: The newly developed multimedia information **partial encipherment** system enables free selection of confidential information on the screen from a text containing **document**, charts, and so on and enciphering so that only those in possession of the deciphering key can understand the confidential information. Moreover, data of items or optional portions of each item can be enciphered when the data is entered by the terminal unit. Thus information is stored in the host computer in a partially enciphered state. Using this new system reduces the possibility of hackers and host operators gaining access to confidential information. (author abst.)

DESCRIPTORS: cryptogram; data protection; security system; access control; **document**; image; database; multi-media; computer security; public key cryptography; cryptography key

BROADER DESCRIPTORS: protection; system; control; resource( **document** ); information media; security; guarantee

CLASSIFICATION CODE(S): .JD01020V; ND02030R.

13/5/41 (Item 2 from file: 94)

DIALOG(R) File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03419287 JICST ACCESSION NUMBER: 97A0819672 FILE SEGMENT: JICST-E  
**Visual Computing. The Improvement of the Image Quality of Fractal Image Compression Method.**

TSUBOI TOMO (1); NAKAMURA KAZUAKI (1); TSUNEDA MASATOSHI (1); YAMAMOTO SHINJI (1); ISHIKAWA ATSUSHI (2); ITO TETSUYA (2)

(1) Toyohashi Univ. of Technol.; (2) Minoruta

Gazo Denshi Gakkaishi (Journal of the Institute of Image Electronics Engineers of Japan), 1997, VOL.26, NO.4, PAGE.397-405, FIG.11, TBL.1, REF.10

JOURNAL NUMBER: S0815AAG ISSN NO: 0285-9831

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: In this paper, we proposed two methods of fractal image compression to improve the quality of the decompressed image. First we proposed a fractal image compression method using the mathematical morphology. We divided an original image into a smooth part and an edge part by using the mathematical morphology. After that, the smooth **part** was **encoded** by the fractal block coding. The other side, the edge part was calculated run length of gray scale and encoded by the Huffman coding. Next, we proposed a fractal image compression method using approximate errors. We calculated error image between the range block and its fractal approximation. After that, the error image was calculated run length of gray scale and encoded by the Huffman coding. When test images were compressed by these two methods, restored images were maintained of high quality. And they achieved good result of subjective estimation in comparison with the conventional method. (author abst.)

DESCRIPTORS: fractal; coding(signal); image compression; image reproduction; image quality; edge detection; block code; Huffman code; error(measure); image; **document** image

BROADER DESCRIPTORS: modification; signal processing; treatment; image processing; information processing; regeneration; image characteristic; characteristic; detection; code

CLASSIFICATION CODE(S): JE04010I

13/5/42 (Item 3 from file: 94)

DIALOG(R) File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03124130 JICST ACCESSION NUMBER: 96A0838216 FILE SEGMENT: JICST-E  
**Handling cases of MF bar codes . Part 3. - New and easy bar code**

utilization. Possibility of easy barcode preparation by anyone with  
EUB software.

HIRAMOTO JUN'YA (1)

(1) Ainikkusu

Materiaru Furo(Material Flow), 1996, VOL.37,NO.9, PAGE.18-22, FIG.4

JOURNAL NUMBER: G0534ACS ISSN NO: 1342-4599

UNIVERSAL DECIMAL CLASSIFICATION: 681.327.2

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: End user Barcoding (EUB)" which makes the construction of bar code system simple for anyone is outlined. AINIX Co., Ltd. which is a barcode system development company, has developed barcode generating software "BarStar" to be executed on WINDOWS. Initiate the BarStar with word processor software and generate a barcode. Then it can be pasted to a **document** made by the word processor. EUB can be easily constructed by this operation.

DESCRIPTORS: bar code; word processor; menu system; program package

BROADER DESCRIPTORS: special purpose computer; computer; hardware; method; computer program; software

CLASSIFICATION CODE(S): JC04050U

13/5/43 (Item 4 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

03124129 JICST ACCESSION NUMBER: 96A0838215 FILE SEGMENT: JICST-E

**Handling cases of MF bar codes . Part 1 - Reasonable utilization cases observed in upgrading bases. System up by barcodes. - Vital point of good command of them.**

Materiaru Furo(Material Flow), 1996, VOL.37,NO.9, PAGE.10-14, FIG.8

JOURNAL NUMBER: G0534ACS ISSN NO: 1342-4599

UNIVERSAL DECIMAL CLASSIFICATION: 681.327.2 658.86/.87

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: Four examples of the advanced use of bar-code for picking, sorting and inspecting products are introduced. 1) processed food wholesaler where barcode is applied to product inspection and automatic sorting after picking, 2) a store for daily used clothing where sorting and storage delivery by case are fully automated, 3) a bed/bedding manufacturing and selling business making the best of four types of barcode : NW-7, ITF, JAN, and CODE39, 4) returned magazine treatment at a book wholesaler which makes the best of barcode for an enormous database.

DESCRIPTORS: bar code; sorting(handling); inspection; physical distribution ; printing and publishing industry; distribution center; food industry; supermarket; publications

BROADER DESCRIPTORS: cargo handling; distribution(marketing); manufacturing industry; industry; retail store; resource( **document** )

CLASSIFICATION CODE(S): JC04050U; KA080000

13/5/44 (Item 5 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

02089683 JICST ACCESSION NUMBER: 94A0766210 FILE SEGMENT: JICST-E

**Development of BERMUDA: A Radiation Transport Code System. Part III. A One-dimensional Adjoint Neutron Transport Code.**

TANAKA S (1); NAKASHIMA H (1); SUZUKI T (2); HASEGAWA A (3)

(1) Japan Atomic Energy Research Inst., Ibaraki-ken; (2) Nuclear Energy

Data Center; (3) Nuclear Power Engineering Corp.

Nippon Genshiryoku Kenkyujo JAERI,Data,Code, 1994, PAGE.27P, FIG.1, TBL.1,

REF.3

JOURNAL NUMBER: L2147AAJ

REPORT NUMBER: JAERI-DATA-CODE-94-2

UNIVERSAL DECIMAL CLASSIFICATION: 62-758.35+621.039.538

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: A radiation transport code system BERMUDA has been developed for one-, two- and three-dimensional geometry. Purpose of the development is to establish a basis of an accurate shielding calculation method for general use. The time-independent transport equation is numerically solved using a direct spatial integration method in a multigroup model, to obtain spatial, angular and energy distribution of neutron, gamma rays or adjoint neutron flux. In 1992, four neutron transport codes were reported in JAERI 1327 as Part I. In 1993, four gamma rays transport codes were reported in JAERI-M 93-143 as Part II. In the present report as Part III, reported is the development of an adjoint neutron transport code for one-dimensional spherical geometry. Adjoint neutron flux is used in a sensitivity analysis or in a perturbation calculation. As described in Part I, use of the spherical harmonics expansion is avoided in representing anisotropy of both angular flux and scattering cross section. A group-angle transfer matrix is obtained by integrating double-differential cross sections numerically, taking energy-angle correlation into account. A first collision source method is utilized for a case of point source. Angular flux distribution is obtained by integrating the transport equation over a line segment along each angular discrete ordinate toward each spatial mesh point. A fine energy grid method is used, with a rebalancing scheme concerning the number of gain and loss of particles over each spatial region and also in each energy grid. The 'energy grid' means a 'subgroup' having equal lethargy width to each other in an energy group. As to group constants, the same library, J439B.BERM125X.DATA, is used commonly to the regular(forward) neutron transport codes as in Part I.  
(abridged author abst.)

DESCRIPTORS: radiation shielding; computer program; neutron flux; neutron transport; radiation source; three dimension; manual

BROADER DESCRIPTORS: shielding; software; radiation flux; flux; transport phenomenon; phenomenon; dimension; guide book; publications; resource( document )

CLASSIFICATION CODE(S): MB04000R

13/5/45 (Item 6 from file: 94)

DIALOG(R) File 94:JICST-Eplus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01776693 JICST ACCESSION NUMBER: 93A0668427 FILE SEGMENT: JICST-E  
Development of BERMUDA: A Radiation Transport Code System. Part II.  
Gamma Rays Transport Codes.

SUZUKI T (1); HASEGAWA A (1); TANAKA S (1); NAKASHIMA H (1)

(1) Japan Atomic Energy Research Inst., Ibaraki-ken

Nippon Genshiryoku Kenkyujo JAERI, M Repoto, 1993, PAGE.89P, REF.12

JOURNAL NUMBER: G0711AAF

REPORT NUMBER: JAERI-M-93-143

UNIVERSAL DECIMAL CLASSIFICATION: 62-758.35+621.039.538

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Review article

MEDIA TYPE: Printed Publication

ABSTRACT: A radiation transport code system BERMUDA has been developed for one-, two- and three-dimensional geometries. Purpose of the development is to establish a basis of an accurate shielding calculation method for general use. The time-independent transport equation is numerically solved using a direct integration method in a multigroup model, to obtain spatial, angular and energy distributions of neutron, gamma rays or adjoint neutron flux. In 1992, the neutron transport codes were

reported in JAERI 1327 as Part I. In the present report as Part II, development of gamma rays transport codes is reported. As described in Part I, the spherical harmonics expansion is not used in representing anisotropy of both angular flux and scattering cross sections. Group-angle transfer matrix is calculated by numerically integrating the Klein-Nishina formula for Compton scattering, taking energy-angle correlation into account. Pair production and annihilation of electrons are also contained in the matrix. A first collision source method is used for a case of point source. Angular flux distribution is obtained by integrating the transport equation over the line segment along each angular discrete ordinate at each spatial mesh point. A fine energy grid(subgroup having equal energy width) method is used, with a rebalancing scheme concerning the number of gain and loss of photons over each coarse mesh region and also in each energy grid. (abridged author abst.)

DESCRIPTORS: transport phenomenon; computer program; photon; gamma-ray; manual; benchmark(computer); transportation; Compton scattering; electron pair creation; angular distribution

BROADER DESCRIPTORS: phenomenon; software; gauge boson; elementary particle; electromagnetic wave; wave motion; radioactive ray; guide book; publications; resource( **document** ); elastic scattering; scattering; electromagnetic interaction; interaction; pair production; particle production; distribution

CLASSIFICATION CODE(S): MB04000R

13/5/46 (Item 7 from file: 94)

DIALOG(R) File 94:JICST-Eplus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01306982 JICST ACCESSION NUMBER: 91A0423934 FILE SEGMENT: JICST-E

Document **processing system using partial crypton method. Intelligent coding based on attributes of information.**

OKANO HIROKAZU (1); KOMOTO MAKOTO (1)

(1) Hiroshimabunkyojodai

Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1991, VOL.1991,NO.Spring Pt 6, PAGE.6.261, FIG.1, REF.2

JOURNAL NUMBER: G0508ADY

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80 621.391.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

DESCRIPTORS: word processing; cryptogram; coding(signal); reliability(property); error correction

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; modification; signal processing; performance; error control; control

CLASSIFICATION CODE(S): JE06000L; ND02020G

13/5/47 (Item 8 from file: 94)

DIALOG(R) File 94:JICST-Eplus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01147839 JICST ACCESSION NUMBER: 90A0921276 FILE SEGMENT: JICST-E

**Natural language processing system on ships. (2nd Report. Generation of semantic structure from coded order).**

KIKUCHI JUN (1); SAKAMOTO KEN'YA (1); KATAGI TAKESHI (1)

(1) Kobe Univ. of Mercantile Marine

Kobe Shosen Daigaku Kiyo. 2. Shosen, Rikogakuhen(Review of Kobe University of Mercantile Marine. Part 2. Maritime Studies and Science and Engineering), 1990, NO.38, PAGE.109-116, FIG.8, REF.10

JOURNAL NUMBER: F0165ABK ISSN NO: 0450-609X

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:80

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: In the previous paper, it has been reported an acquisition of conversation data on the training ship Fukae Maru, and shown that main part of conversation on ships is highly formalized order and answer. It is reasonable to call that highly formalized **part "coded order"**, because the ordres which belong to this part are highly simplified and have unambiguous meaning, comparable to computer language. This unambiguity of coded orders increases reliability of communication between crew, and also renders less difficult in natural language processing of conversation on ships. This paper shows an algorithm for discrimination coded orders from other conversation, and for generation of semantic structure from coded order. It is possible to implement the discrimination algorithm by simple pattern matching. Frame representation is applied as semantic structure which is implemented in object oriented environment on Symbolics LISP machine "Flavor". It should be refined frame structure of coded order, and investigated how to invoke those semantic representation for analysis on ordinary conversation data. (author abst.)

DESCRIPTORS: automatic language processing; natural language; data analysis ; ship; coding(signal); semantics; pattern classification; syntactic analysis; algorithm; feature extraction; LISP; language; dictionary

BROADER DESCRIPTORS: computer application; utilization; information processing; treatment; analysis; modification; signal processing; linguistics; cultural science; science; classification; analysis(separation); extraction; separation; high level language; programming language; formal language; list processing language; application oriented language; book; publications; resource( **document** )

CLASSIFICATION CODE(S): JE06000L

13/5/48 (Item 9 from file: 94)

DIALOG(R)File 94:JICST-Eplus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

00297805 JICST ACCESSION NUMBER: 86A0453759 FILE SEGMENT: JICST-E

**User's manual for SPLPLOT-2: A computer code for data plotting and editing in conversational mode.**

MURAMATSU KEN (1); MATSUMOTO KIYOSHI (1); KOHSAKA ATSUO (1); MANIWA MASAKI (2)

(1) Japan Atomic Energy Res. Inst., Tokai Res. Establishment; (2) Aivesuveru

Nippon Genshiryoku Kenkyujo JAERI,M Repoto, 1985, PAGE.137P

JOURNAL NUMBER: G0711AAF

REPORT NUMBER: JAERI-M-85-91

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:519.6

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Technical Report

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: The computer code SPLPLOT-2 for plotting and data editing has been developed as a **part** of the **code** package : SPLPACK-1. The SPLPLOT-2 code has capabilities of both conversational and batch processings. This report describes the user's manual for SPLPLOT-2. The following improvements have been made in the SPLPLOT-2. (1) It has capabilities of both conversational and batch processings, (2) function of conversion of files from the input SPL (Standard Plotter) files to internal work files have been implemented to reduce number of time consuming access to the input SPL files, (3)user supplied subroutines can be assigned for data editing from the SPL files, (4) in addition to the two-dimensional graphs, streamline graphs, contour line graphs and bird's-eye view graphs can be drawn.(author abst.)

DESCRIPTORS: data processing; editing; application program; guide book; transient phenomenon; data format; graph processing; contour line

BROADER DESCRIPTORS: information processing; treatment; action and behavior  
; computer program; software; publications; resource( **document** );  
phenomenon; type; line  
CLASSIFICATION CODE(S): JE02000J

13/5/49 (Item 1 from file: 99)  
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs  
(c) 2003 The HW Wilson Co. All rts. reserv.

1417017 H.W. WILSON RECORD NUMBER: BAST96050055

**OpenDoc says OLE to developers**

VanderVeer, Emily A;

Byte v. 21 (July '96) p. 49-50

DOCUMENT TYPE: Feature Article ISSN: 0360-5280 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: Developing OpenDoc components gives the user OLE (Object Linking and Embedding) interoperability for free. OpenDoc was designed to be open in terms of platform independence and in terms of its ability to interoperate with other compound- **document** architectures, such as OLE. If the user **codes** an OpenDoc **part** in OS/2 or Windows or on the Mac, he has an OpenDoc part and an OLE component at no extra cost and with no extra development effort.

DESCRIPTORS: Computer operating systems--Compatibility; Software portability; OLE (Computer programs);

13/5/50 (Item 1 from file: 583)  
DIALOG(R)File 583:Gale Group Globalbase(TM)  
(c) 2002 The Gale Group. All rts. reserv.

06671940

cenicom soups up indutrial printer line

HONG KONG: PEDESTAL PRINTERS INTRODUCED IN HK

Sing Tao Daily (XKL) 13 Aug 1998 p.p21

Language: ENGLISH

Genicom has introduced the new 4840p and 4810p printer in Hong Kong. The new printers are designed for manufacturing and warehousing environments. Applications include high volume data processing, industrial graphics, bar-  
**codes** , multi- **part** forms as shipping **documents** , orders and invoices. The Genicom products are network-ready with support for such industry standard connections as Ethernet and Token Ring. \*

COMPANY: GENICOM

PRODUCT: Computer Peripherals (3573CP);  
EVENT: Product Design & Development (33);  
COUNTRY: Hong Kong (9HON);



| Scs | Items | Description                                                      |
|-----|-------|------------------------------------------------------------------|
| S1  | 400   | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -  |
|     |       | OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY  |
| S2  | 8468  | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-   |
|     |       | RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML |
|     |       | OR VCML                                                          |
| S3  | 16093 | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?           |
| S4  | 43    | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-    |
|     |       | PHER? OR ENCIPHER? OR ENCYIPHER? OR CRYPT? OR CODE? ? OR CODED)  |
| S5  | 4081  | SUN()MICROSYSTEMS                                                |
| S6  | 8507  | S1 OR S2                                                         |
| S7  | 2     | S6 AND S4                                                        |
| S8  | 7     | S3 AND S4                                                        |
| S9  | 9     | S7 OR S8                                                         |
| S10 | 0     | S9 AND S5                                                        |
| S11 | 5     | S9 NOT PY>1999                                                   |
| S12 | 5     | S11 NOT PD>19991021                                              |

File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Nov  
(c)2003 Info.Sources Inc

12/5/1

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00103175 DOCUMENT TYPE: Review

**PRODUCT NAMES: IBM Cryptolope (595691)**

**TITLE: IBM's Digital Shrinkwrapper**

**AUTHOR: Loshin, Pete**

**SOURCE: Byte, v22 n8 p138(1) Aug 1997**

**ISSN: 0360-5280**

**HOME PAGE: <http://www.byte.com>**

**RECORD TYPE: Review**

**REVIEW TYPE: Review**

**GRADE: B**

IBM InfoMarket's IBM Cryptolope electronic commerce technology packs content in a Cryptolope container. The consumer then downloads the Cryptolope, and sends a request to purchase content. The consumer payment is cleared, and the consumer receives a key to unlock Cryptolope. The consumer then opens the Cryptolope content. Cryptolope technologies will not be in products until late in 1997. Cryptolope combines encryption and digital signatures to ensure that a digital product can be transported and copied freely, but only after a payment is made. Cryptolope should prevent pirates from quickly and precisely copying digital products, such as news stories, books, music, pictures, or video. However, it will be designed to be minimally intrusive to users' activities. The Opener browser plug-in is required to open containers, and Opener works with Microsoft's Microsoft Internet Explorer and Netscape Communications' Netscape Navigator on Windows; a Java edition is planned. During testing, the beta code used did pack encrypted, compressed, and digitally signed files into a Cryptolope container. No facility for opening or previewing files was implemented, but users could drag-and-drop a file into any **part** of the **Cryptolope** and save a **template** of the Cryptolope. Other features will be added to the final release.

**COMPANY NAME: IBM Corp (351245)**

**SPECIAL FEATURE: Screen Layouts Charts**

**DESCRIPTORS: Computer Security; Content Providers; Content Subscription;  
Digital Signatures; E-Payment; Electronic Publishing; Encryption**

**REVISION DATE: 20010330**

12/5/2

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
(c)2003 Info.Sources Inc. All rts. reserv.

00096727 DOCUMENT TYPE: Review

**PRODUCT NAMES: Introduction to Programming Java Applets (641863)**

**TITLE: MindQ's Introduction to...Java Targets Entry-Level to Pro Users**

**AUTHOR: Chernicoff, David**

**SOURCE: Computer Shopper, v16 n11 p290(1) Nov 1996**

**ISSN: 0886-0556**

**HOME PAGE: <http://www.computershopper.com>**

**RECORD TYPE: Review**

**REVIEW TYPE: Review**

**GRADE: B**

MindQ Publishing's Introduction to Programming Java Applets is designed for beginners and experienced programmers alike. The CD-ROM-based tool is the first of a projected series of interactive titles describing Java programming. Over 2,000 topics are covered, including **Hypertext Markup**

**Language** ( HTML ) and Java, events and threads, and control structure. Many instructive animations and pop-ups are included, and the CD is designed to be comprehensive enough to be used by programmers with all levels of experience, including those who have never programmed before and programmers who want to learn object-oriented (OO) programming. However, the attempt to appeal to such a broad-based audience does not fully succeed because experienced developers' information is mixed right in with beginners' information in the introductory sections. Otherwise, the development environment provided allowed users to select parts of the learning process most useful for their particular levels of knowledge. Procedural programmers can learn from comprehensive coverage of object-oriented (OO) programming, including discussions of Superclass methodologies and polymorphism. Code sample allow users to construct Java applets to do basic animations, and the tutorial reformats the original Java **code** as **part** of a more advanced applet that allowed users to customize animation output.

PRICE: \$50

COMPANY NAME: MindQ Publishing (611514)

SPECIAL FEATURE: Charts Screen Layouts

DESCRIPTORS: CD-ROMs; E-Learning; **HTML** ; Internet Utilities; Java; OOP (Object Oriented Programming); Programming Languages; Training

REVISION DATE: 20020228

12/5/3

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.

(c)2003 Info.Sources Inc. All rts. reserv.

00088819

DOCUMENT TYPE: Review

PRODUCT NAMES: **Company--FileNET Corp (850586) ; Company--Saros Corp (860891)**

**TITLE: Workflow giant FileNet snaps up Saros**

**AUTHOR: Cole, Barb**

**SOURCE: Network World, v13 n5 p42(1) Jan 29, 1996**

**ISSN: 0887-7661**

**HOME PAGE: <http://www.nwfusion.com>**

RECORD TYPE: Review

REVIEW TYPE: Company

FileNet recently acquired Saros, a maker of **document** management software, in order to give customers single-vendor support for networked workflow, imaging, and **document** management products. FileNet is now a competitor to IBM and Wang Labs, which currently dominate the market for larger imaging systems. FileNet will make Saros **document** management **code part** of an integrated product suite that offers **document** imaging software from Watermark Software, as well as workflow and **document** management programs. Also included is Computer Output to Laser Disc (COLD) technology purchased from Greener Software. COLD archives **documents** from mainframes or magnetic and optical disks. Saros sells 10,000-seat licenses, while FileNet focused on supporting departmental needs. The products are designed to allow customers to manage unstructured data over enterprise networks and the Internet.

COMPANY NAME: FileNET Corp (459151); Saros Corp (468614)

SPECIAL FEATURE: Graphs

DESCRIPTORS: **Document** Management; Image Storage; Optical Discs; Workflow

REVISION DATE: 20020703

12/5/4

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.

(c)2003 Info.Sources Inc. All rts. reserv.

00078925

DOCUMENT TYPE: Review

**PRODUCT NAMES:** QuickDraw 3D 1.0 (371556)

**TITLE:** 3-D Is Target of New Software, Hardware Technologies

**AUTHOR:** Heck, Mike

**SOURCE:** InfoWorld, v17 n23 p67(1) Jun 5, 1995

**ISSN:** 0199-6649

**HOME PAGE:** <http://www.infoworld.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Product Analysis

**GRADE:** Product Analysis, No Rating

Apple Computer's QuickDraw 3D 1.0, a platform-neutral 3D rendering engine, will help place 3D functions in the hands of just about all users in the near future. It uses a metafile format that allows users to work with many applications and platforms. Applications supporting QuickDraw 3D on any platform can modify 3D graphics in **documents**. Other unique features include standard 3D building blocks, such as complex polygons, mesh, and nonuniform rational B-spline curves, for better speed. Various hardware manufacturers, including Matrox Graphics, support QuickDraw. Microsoft licensed Silicon Graphics Open-GL 3D API, making the **code part** of Windows 95. The module works like QuickDraw to offload 3D processing to the operating system. Other developers, including Autodesk and Ithaca Software, sell a UNIX development kit for HOOPS, a platform-neutral programming library for 2D/3D graphics applications.

**COMPANY NAME:** Apple Computer Inc (114936)

**DESCRIPTORS:** 3D Graphics; Apple Macintosh; Draw; Graphics Tools; Image Processing; MacOS

**REVISION DATE:** 20001130

12/5/5

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

(c)2003 Info.Sources Inc. All rts. reserv.

00070249

DOCUMENT TYPE: Review

**PRODUCT NAMES:** Company--Netscape Communications Corp (858498)

**TITLE:** Start-up Offers New Tools to do Business on Internet

**AUTHOR:** Messmer, Ellen

**SOURCE:** Network World, v11 n37 p12(1) Sep 12, 1994

**ISSN:** 0887-7661

**HOME PAGE:** <http://www.nwfusion.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Company

Netscape Communications offers two Mosaic software products that increase the ability of companies to conduct business via the Internet. NetSite Communications Server and NetSite Commerce Server present multimedia-based data with added encryption and authorization security for business transactions. The two products allow users to post catalogs or other **documents** that do not require security, or to allow purchasers to send such data as credit card numbers in a secure environment. Marc Andreessen, the developer of the first Mosaic research **code**, is **part** of the Netscape Communications team. Mark Koontz, VP of marketing for the startup, says that NetSite works with all Mosaic client software, while NetScape provides security functions. The San Jose Mercury News, a west coast newspaper, will be offered in Fall 1994, via the Internet with Mosaic.

**COMPANY NAME:** Netscape Communications Corp (592625)

**DESCRIPTORS:** Computer Security; Internet Security; Multimedia; Software

Marketing  
REVISION DATE: 20020703

1.

| Set | Items  | Description                                                      |
|-----|--------|------------------------------------------------------------------|
| S1  | 8142   | PA='SUN MICROSYSTEM INC':PA='SUN MICROSYSTEMS INC'               |
| S2  | 4652   | XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE -  |
|     |        | OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY  |
| S3  | 29427  | EXTENSIBLE() (MARKUP OR MARK()UP) () LANGUAGE? OR XML OR HYPE-   |
|     |        | RTEXT OR HYPERMEDIA OR (MARKUP OR MARK()UP) () LANGUAGE? OR HTML |
|     |        | OR VCML                                                          |
| S4  | 586949 | STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?           |
| S5  | 19319  | (PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY-    |
|     |        | PHER? OR ENCIPHER? OR ENCYIPHER? OR CRYPT? OR CODE? ? OR CODED)  |
| S6  | 506    | S1 AND (S2 OR S3)                                                |
| S7  | 23     | S1 AND S2                                                        |
| S8  | 503    | S1 AND S3                                                        |
| S9  | 20     | S1 AND S2 AND S3                                                 |
| S10 | 12     | S6 AND S5                                                        |
| S11 | 381    | S6 AND S4                                                        |
| S12 | 12     | S11 AND S5                                                       |
| S13 | 34     | S7 OR S9 OR S10 OR S12                                           |
| S14 | 34     | S13 AND IC=(G06F? OR H04L?)                                      |

File 347: JAPIO Oct 1976-2003/Aug (Updated 031202)  
(c) 2003 JPO & JAPIO

File 348: EUROPEAN PATENTS 1978-2003/Nov W05  
(c) 2003 European Patent Office

File 349: PCT FULLTEXT 1979-2002/UB=20031203, UT=20031127  
(c) 2003 WIPO/Univentio

File 350: Derwent WPIX 1963-2003/UD, UM & UP=200379  
(c) 2003 Thomson Derwent

14/5,K/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00900903

Object-oriented system, method and article of manufacture for a  
client-server session WEB access in an interprise computing framework  
system

Objektorientiertes System, Verfahren und hergestellter Gegenstand zum  
Webzugriff mittels einer Client-Server-Sitzung in einem  
Unternehmens-Datenverarbeitungsrah

Systeme oriente objet, procede et article de fabrication pour une session  
client-serveur pour acceder au Web dans le cadre d'un systeme d'objets  
informatiques d

PATENT ASSIGNEE:

SUN MICROSYSTEMS, INC. , (1392732), 2550 Garcia Avenue, Mountain View,  
California 94043-1100, (US), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE

INVENTOR:

Gish, Sherri L., 822 DeVoto Street, Mountain View, California 94043, (US)

LEGAL REPRESENTATIVE:

Browne, Robin Forsythe, Dr. (55142), Urquhart-Dykes & Lord Tower House  
Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 822487 A2 980204 (Basic)

APPLICATION (CC, No, Date): EP 97110833 970701;

PRIORITY (CC, No, Date): US 675252 960701

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-009/46

ABSTRACT EP 822487 A2

An interprise computing manager in which an application is composed of  
a client (front end) program which communicates utilizing a network with  
a server (back end) program. The client and server programs are loosely  
coupled and exchange information using the network. The client program is  
composed of a User Interface (UI) and an object-oriented framework  
(Presentation Engine (PE) framework). The UI exchanges data messages with  
the framework. The framework is designed to handle two types of messages:  
(1) from the UI, and (2) from the server (back end) program via the  
network. The framework includes a component, the mediator which manages  
messages coming into and going out of the framework. The system includes  
software for a client computer, a server computer and a network for  
connecting the client computer to the server computer which utilize an  
execution framework code segment configured to couple the server computer  
and the client computer via the network, by a plurality of client  
computer code segments resident on the server, each for transmission over  
the network to a client computer to initiate coupling; and a plurality of  
server computer code segments resident on the server which execute on the  
server in response to initiation of coupling via the network with a  
particular client utilizing the transmitted client computer code segment  
for communicating via a particular communication protocol. Communication  
is initiated utilizing the network to acquire characteristics of the  
client from the network.

ABSTRACT WORD COUNT: 238

LEGAL STATUS (Type, Pub Date, Kind, Text):

Change: 030129 A2 Legal representative(s) changed 20021212

Application: 980204 A2 Published application (Alwith Search Report  
;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text                     | Language  | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A                           | (English) | 9806   | 1309       |
| SPEC A                             | (English) | 9806   | 22731      |
| Total word count - document A      |           |        | 24040      |
| Total word count - document B      |           |        | 0          |
| Total word count - documents A + B |           |        | 24040      |

PATENT ASSIGNEE:

**SUN MICROSYSTEMS, INC ...**

INTERNATIONAL PATENT CLASS: **G06F-009/46**

...SPECIFICATION copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** , or the patent disclosure, as it appears in the Patent and Trademark Office.

Field of the Invention...preferred embodiment;

Figure 27 describes the forms of a Presentation Engine, as an abstract Java class, a **template** for development, and an executable component in an application in accordance with a preferred embodiment;

Figure 28 describes the functions developers must fill in using the server program **template** in accordance with a preferred embodiment;

Figure 29 illustrates Server Properties in accordance with a preferred embodiment...

...geometrical designs.

Objects are defined by creating "classes" which are not objects themselves, but which act as **templates** that instruct the compiler how to construct the actual object. A class may, for example, specify the... the design and development effort for software can be achieved. A preferred embodiment of the invention utilizes **HyperText Markup Language (HTML)** to implement **documents** on the Internet together with a general-purpose secure communication protocol for a transport medium between the client and the merchant. HTTP or other protocols could be readily substituted for **HTML** without undue experimentation. Information on these products is available in T. Berners-Lee, D. Connolly, "RFC 1866: **Hypertext Markup Language - 2.0**" (Nov. 1995); and R. Fielding, H. Frystyk, T. Berners-Lee, J. Gettys and J.C. Mogul, "HypertextTransfer Protocol --HTTP/1.1:HTTP Working Group Internet Draft" (May 2, 1996).

**HTML** is a simple data format used to create **hypertext documents** that are portable from one platform to another. **HTML documents** are SGML **documents** with generic semantics that are appropriate for representing information from a wide range of domains. **HTML** has been in use by the World-Wide Web global information initiative since 1990. **HTML** is an application of ISO Standard 8879:1986 Information Processing Text and Office Systems: Standard Generalized **Markup Language (SGML)**.

To date, Web development tools have been limited in their ability to create dynamic Web applications which span from client to server and interoperate with existing computing resources. Until recently, **HTML** has been the dominant technology used in development of Web-based solutions. However, **HTML** has proven to be inadequate in the following areas:

- o Poor performance;
- o Restricted User interface capabilities...

...real-time stock tickers, animated icons, etc.) can be created, and client-side performance is improved. Unlike **HTML** , Java supports the notion of client-side validation, offloading appropriate processing onto the client for improved performance...comply with Sun's Java Application Programming Interface (API) allowing developers to add "interactive content" to Web **documents** (e.g. simple animations, page adornments, basic games, etc.). Applets execute within a Java-compatible browser (e ...

...blocks are called ActiveX Controls, small, fast components that enable developers to embed parts of software in **hypertext markup language (HTML)** pages. ActiveX Controls work with a variety of programming languages including Microsoft Visual C++, Borland Delphi, Microsoft...

...runtime (Java JDK) or JavaOS installed. Application client programs are developed in Java using a null application **template** that contains the necessary Java classes and methods for integration with a Graphical User Interface (GUI). The **template** includes Java classes which will allow the client program to communicate with the server program. Scripts and...



...to create an application front end referred to as a Presentation Engine, hereinafter (PE), from a provided **template**. The PE **template** includes methods (logic in an object) to send messages and their data through a client communication library. Developers modify the **template** to specify the messages and data required for their application. The communication library handles the passing of...administration of its set of applications. The clients use the web to access the servers resources. A **template** is also provided for creating an applet that enables users at client nodes to start applications from...The fourth step is to develop a Presentation Engine front end. Java is utilized for this task. **Templates** and tools are provided to facilitate this task. The detailed tasks associated with facilitating these tasks are...are provided as applications on server nodes in accordance with a preferred embodiment. A Java startup applet **template** is also provided to facilitate development of the applications startup applet.

#### Presentation Engine Development

Presentation engine development...

...preferred embodiment. Developing a specific application presentation engine means extending and customizing the basic presentation engine framework **template**. A Presentation Engine (PE) is itself a system with two components: (1) a UI implemented in Java...  
...a developer can link the UI 900 to the UI Adaptor 910.

#### (2) Extend the PE Framework **Template** (960)

Figure 9 illustrates how the PE Framework 960 architecture is arranged to facilitate two kinds of...of a particular application and specify appropriate maps for views or UI components All of the class **templates** necessary to be extended into a fully functional model are provided The Model data 1600 is utilized...the Java Virtual Machine is present.

#### \* Rapid development.

Clients are developed in Java using a null application **template** that contains the necessary Java classes and methods for integration with a GUI and a Communication Library...ICE-T application is to create an application front end, a Java Presentation Engine, from the provided **template**. The Presentation Engine (PE) **template** includes methods to send messages and their data through a client Communication Library. Developers modify the **template** to specify the messages and data required for their application. The Communication Library handles the passing of...

...additional ICE-T files and programs that manage applications on the server. ICE-T also provides a **template** for creating a startup applet that enables users to start applications from a browser. Chapter 3, "Configuring...the Application Manager starts the server program and initiates a network session.

The Application Manager downloads an **HTML** page with a startup applet for the application. When the user runs the startup applet, the Application Manager selects a compiled Presentation Engine and downloads an **HTML** page containing the applet tag for it to the client using HTTP. The compiled Presentation Engine includes...

...The client program consists of:

- \* A GUI built with Java
- \* A Java Presentation Engine built using a **template**

These components, and related classes used by the Presentation Engine, combine to behave as a single client...

...a language that calls C and it must include functions for handling messages from the client. A **template** with these functions is provided, as is a main routine that makes calls to the provided server Communication Library.

ICE-T provides these **templates**, tools, and libraries for developing applications:

- \* pe(underscore) **template**.java

A **template** for a working Presentation Engine.

- \* ICE-T packages (supplementary to the standard Java packages)
- \* server- **template .c** and server(underscore) **template .cc**

Server program **templates** (one each for C and C++) that define and enable message passing to and from the client. The **templates** can be used with existing programs or used as a starting point for developing server programs. These **templates** are analogous to the pe(underscore) **template** used for the client.

- \* ICE-T message data types that work the same on both client and Engine

**template** is pe(underscore) **template .java**. You can find it in the ICE-T application installation directory under **Templates /C** or **Templates /C++**. The file is placed in each of the **Template** subdirectories for convenience. The pe(underscore) **template** is the same in both files.

Figure 27 describes the forms of a Presentation Engine, as an abstract Java class, a **template** for development, and an executable component in an application in accordance with a preferred embodiment.

To create a working Presentation Engine, you copy the pe(underscore) **template** file and make these changes:

- \* Supply your own Presentation Engine name.
- \* Create user interface components or map...

...to implement a createModel() method, described in this chapter. Both options are supported by the pe(underscore) **template** .

#### ICE-T Classes and Packages

The **documentation** for the ICE-T Presentation Engine API is presented in **HTML** form, like the Java API **documentation** , and is accessible from the following URL:

file:// /<ICE-T Installation Directory>/doc/api

where <ICE-T...

...T primitive data types.

#### Working with the ICE-T Directory Structure

Before developing applications, copy the provided **templates** and Makefiles to an application development directory. There are two subdirectories of **templates** .

- \* <ICE-T Installation Directory>/ **Templates /C**

Contains Example. mk, pe(underscore) **template . java**, and server(underscore) **template .c**.

- \* <ICE-T Installation Directory>/ **Templates /Cplusplus**

Contains Example .mk, pe(underscore) **template . java**, and server(underscore) **template . cc**.

For example, create an application directory for an application named myAppName in which the server program is written in C++, and copy the **templates** to it:

```
% mkdir myAppNams
```

```
% clo <ICE-T Installation Directory>/ Templates /C++/* <ICE-T Installation Directory>/Applications/myAppName/.
```

The ICE-T installation scripts and MakeHierarchy depend on the...

...in detail throughout this section:

1. If you have not done so already, copy one of the **Templates** subdirectories to the Applications directory.

The ICE-T installation directory includes a communication directory for developers to...the file.

3. Create a Presentation Engine class.

Create your own Presentation Engine definition using pe(underscore) **template .java**.

4. Integrate the Presentation Engine with the user interface (GUI).

Create a separate user interface class...

...the GUI with the Presentation Engine by implementing the createUI ( ) method that is found in pe(underscore) **template .java**.

"Working with the ICE-T Directory Structure" describes how to implement createUI().

5. Determine and define...

...modifying server programs to work with clients. In both client and server program cases, ICE-T provides **templates** with methods (Presentation Engine) and functions (server) for registering handlers. Developers provide only the application-specific messages and data.

Creating a Presentation Engine Class

Copy one of the **Templates** subdirectories to the Applications subdirectory. There are two subdirectories, one for C and one for C++. For...

...server program for myAppName is to be written in C, copy all of the files from the **Templates** /C directory:

```
% inkair myAppName
```

```
% cp <ICE-T Installation Directory>/ Templates /C/*  
<ICE - T Installation Directory>/Applications/myAppName/.
```

For each Presentation Engine you create, modify pe(underscore) **template** .java to declare a class that extends the abstract Java class PresentationEngine:

```
public class myPresentationEngine extends PresentationEngine...
```

...if the Presentation Engine class is named myPresentationEngine, the file should be named myPresentationEngine. java.

pe(underscore) **template** . java contains the class and method declarations that you implement to provide the functionality you want. The...

...initializeApplication () unless your client program requires local initialization before communication is started.

Importing Packages

The pe(underscore) **template** imports the appropriate packages, including these ICE-T packages and standard Java packages:

```
* sunsoft.ice.pe  
* sunsoft...
```

...a Presentation Engine class must have these import statements. Don't delete them from the pe(underscore) **template** .

```
import sunsoft. ice.pe. ;  
import java.net.*;  
import java.io. ;  
import java .applet.*;  
import java.util. *;  
import...
```

...and attach Observer objects to them.

createModel () is optional and is commented out in the pe(underscore) **template** . To use createModel ():

```
* Uncomment the method in the Pe(underscore) template  
* Create Observable data objects to hold data from the server  
* Attach Observers to the data objects, if...as given. The Presentation  
Engine makes calls to the UI Adaptor to register messages. The  
Pe(underscore) template includes the necessary methods; developers  
provide the message bodies as described in the procedures in this chapter  
...
```

...not need to modify PeUIAdaptor, but do call methods in it as directed by the pe(underscore) **template** .

Handling Events from the Server

Events from the server program that generate messages for the client can...

...for Updates to the User Interface

To create a handler that updates the user interface, use the **template** to define a class that extends PeUIHandler. PeUIHandler is an abstract class for a handler of messages...

...updating the user interface and for sending messages using the uiAdaptor.

This example from the pe(underscore) **template** shows the definition for a class named SampleUIHandler. The constructor method passes adaptor and uiContainer as arguments...

...for the events that affect the model.

To create a handler that updates the model, use the **template** to define a class that:

\* Extends PeModelHandler.

PeModelHandler is an abstract class for a handler of messages...

...your Presentation Engine has access to the model class for updates.

This example from the pe(underscore) **template** shows the definition for a class named SampleModelHandler. Use this definition as is, but supply the name...

...in the Presentation Engine by filling in the createMessageHandler () method.

createMessageHandler () is defined in the pe(underscore) **template** to register handlers with either the user interface or the model. Use this method as defined, changing...

...you defined.

Registering Handlers for Updates to the User Interface

This code snippet from the Pe(underscore) **template** illustrates how to register the handler defined in the example in "Creating Handlers for Updates to the...name of the handler in the model. This code is defined for you in the pe(underscore) **template**.

This code snippet illustrates how to register the handler defined in "Creating Handlers for Updates to the...

...provides default shutdown handlers. The shutdown handlers are defined in the PresentationEngine class, not in pre(underscore) **template**. Developers who do not want to accept the default shutdown handling can write their own shutdown handlers...

...any language that can call the C programming language. ICE-T provides both C and C++ language **templates** for handling messages and making calls to the server Communication Library. Use the appropriate **template** to start a new server program in C or C++, or add the **template** functions to an existing server program.

Note - If you have not done so already, copy one of the **Templates** subdirectories to the Application subdirectory. There are two subdirectories, one for C and one for C++. Each directory contains a server(underscore) **template**, one for C and the other for C++.

To enable communication between the server program and the...

...Messages in the Server Program".

\* Make calls to the ICE-T server Communication Library.

The server program **templates** provide functions for message handling and communication. Developers just supply the application-specific message names and their handlers. For C server programs use server-**template**. C. For C++ programs use server(underscore) **template**.cc. The **templates** are in the ICE-T installation directory under **Templates** /C and **Templates** /C++ respectively.

Each server program **template** calls a default main routine. The default main () routines are provided for convenience. If you choose to ...

...Default main Routine (Optional)".

Figure 28 describes the functions developers must fill in using the server program **template**. All three return integer values of 1 (TRUE) or 0 (FALSE). A return value of 1 (TRUE...

...FALSE) indicates a problem that results in stopping the application. The remaining functions in the server program **templates** can be used as provided.

Figure 29 illustrates Server Properties in accordance with a preferred embodiment.

Handling...

...and employee number (empNumber):

2. Register the message handlers.

Fill in the createMessageHandler ( ) function in the server- **template** to register the handlers with the server Communication Library.

Note that you just use the code in...the Presentation Engine and the server programs. Example.mk is in the ICE-T installation directory under **Templates /C** or **Templates /C++**. These files are copied to the/Applications directory.

To use the makefile, modify it to specify...

...macros for the Presentation Engine source files.

This example specifies the Java files for the Presentation Engine **template** (pe(underscore) **template**.java) and a user interface file named myGui.java. The macros for which you provide values are...

...of the files to those used in your application:

Example.mk specifies files for the server program **template** (server(underscore) **template**). The macros for which you provide values are shown here in bold type. There is a macro...

...mk) to build a customized Access program for use with ICE-T server applications.

\* Application startup applet **template** (Java)

A **template** for making Java applets that launch ICE-T applications. The **template** is in the ICE-T installation directory under StartApplet. Web server (user must install) Supports HTTP connections...

...installation instructions.

Deploying and maintaining ICE-T applications involves these steps:

1. Using a stamp applet and **HTML** pages to launch ICE-T applications
2. Setting up the Web server
3. Customizing (optional) and installing...

...installation scripts for Presentation Engines and server programs

5. Configuring application management files

Using Startup Applets and **HTML** Files

Compiled Presentation Engines can run as applets in a Java-enabled browser. To enable users to launch ICE-T applications from a browser use the named ICE-T **templates** to:

\* Create a startup applet for each application. Use the startAppletDevIR.java **template**.

Using the Startup Applet describes this step.

\* Create a top-level **HTML** file with links to each application. This file serves as a "splash page" identifying the applications available and including links to an **HTML** file for each application. Use splashTemplate.html.

"Creating a Top-Level **HTML** File" describes this step.

\* Create an **HTML** file for each application. Use appTemplate.html.

"Creating Individual Application **HTML** Files" describes how.

Using the Startup Applet

A startup applet provides a way to launch an ICE...

...the applet in a separate user interface window (developer's choice)

You can use the startAppletDevIR.java **template** to launch the applications you build, or create your own applet. The **template** is completely generalized so that it can be used for any of your applications. You supply the application name in a separate parameter to the applet tag. (See "Creating Individual Application **HTML** Files".)

A complete code listing for startAppletDevIR.java is in Appendix B. By default, the startup applet...

...browser window, open startAppletDevIR.java and follow the instruction in the file:

#### Creating a Top-Level **HTML** File

You need a top-level **HTML** file, or "splash page" to present the list of available applications with links to the application-level **HTML** pages for them. When a user chooses a link, the link takes them to an application-level **HTML** page.

ICE-T provides a default **HTML** file for the "splash page." The file, called splashTemplate.html, is in the ICE-T installation directory under StartApplet. You can use the default file or make...

...a top-level Web page for listing the links to your application Web pages:

1. Copy splashTemplate.html to another file. For example:

```
% cp splashTemplate.html myAppSplashPage.html
```

2. Open the file in an editor.
3. Provide a title for the page and any text...

...about the application(s) listed there.

4. Supply the name and the URL of the application-level **HTML** page for each listed application.

For example, if you used appTemplate.html to create an **HTML** file for an application named MyApplication1:

5. Copy the file to the appropriate location on your Web...

...to the named application:

MyApplication1

when a user chooses this link, the browser loads an application-level **HTML** page with the startup applet for the application.

#### Creating Individual Application **HTML** Files

Think of the application-level **HTML** file as the Presentation Engine startup page. This page contains the startup applet that results in the ...

...to the Access Layer on the server.

To create an application-level Web page:

1. Copy alDidTemplate.html to another file. For example:

```
% cp appTemplate.html myAppPage.html
```

2. Open the file in an editor.
3. Include instructions to the user on how to launch...

...startAppletDevIR.java defines a Send button and a class (sendBtn) that handles the user's input. appTemplate.html includes default instructions for using Send. If you want to change the user's interaction with the stamp applet, you would need to change the sendBtn class and the instructions in appTemplate.html.

4. Specify the name of the startup applet.

If you have copied startAiDidletDevIR.java, given it another...

...the Access parameter.

```
<param name=Access value="Access">
```

Be sure that the file you create from appTemplate.html contains the end applet tag </applet>.

Here are the tags for a minimal HTIVIL file using startAlppletDevIR, an application named "MyApplication1", and the default access program name:

```
< html >
```

```
<blockquote>
```

Please provide Username and Password and press the "Send" button to launch the application.

```
</blockquote>
```

```
<hr...>
```

```
...startAppletDevIR.class" width=400 height=400>
```

```
<param name=AppName value="MyApplication1">
```

```
<param name=Access value="Access">
```

```
</applet>
```

```
</ html >
```

When the user launches the startup applet and sends the user data and the application name to...Layer installation script generates the application configuration file automatically. That configuration is the basis for generating an **HTML** wrapper file in which to download the Presentation Engine. You can accept the defaults and let your application use the generated **HTML** wrapper, or you can customize the application configuration file so that it generates a customized **HTML** file to hold the Presentation Engine. See "Configuring Applications" for more information.

Setting up the Web Server...and client program locations and names in appConfigFile. Using the configuration file, the Application Manager generates an **HTML** wrapper for presenting Presentation Engines as applets in a Web browser execution environment (See "Using Startup Applets and **HTML** Files" for more information about how to use startup applets for ICE-T applications.)

To complete the...

...to a Web Browser you use one of two ways to supply application-specific values in the **HTML** wrapper:

\* Run ice - app- install with the required arguments as described in "Installing the ICE-T Application..."

...peClass).

3. Supply messages to return to the browser if user authentication or application stamp fails.

The **template** contains tags for authentication failure and application startup failure messages.

The appConfigFile contains optional tags for you...

...properties.

cc.default(underscore)appmgr(underscore)properties.cc is described in "Customizing the Access Layer".

#### Presentation Engine **Template**

ICE-T provides a null application that you can use as a **template** for Presentation Engines. You can find the file for the **template** in the ICE-T application installation directory under / **Templates**  
/pe(underscore) **template** .java.

#### Startup Applet **Template**

startAfalaletDevIR. java is a Java applet that launches ICE-T applications. The file is generalized to run...

...installation directory under/StartApplet. For instructions on how to use

this file, see "Using Startup Applets and HTML Files".

#### Server Program Templates

This appendix contains code listings for the following templates :

- \* server(underscore) template .c
- \* default(underscore)main.c
- \* server(underscore) template .cc
- \* default(underscore)main.cc

Chapter 2, "Building Program Components describes the location and use of these templates . See "Handling Messages in the Server Program" and "Modifying the Default main Routine (Optional)" for more information.

#### C++ Files

ICE-T provides a server program template and a default main routine for application developers using C++ to develop server programs.

#### C++ Server Program Template

Default main for C++

#### C Server Program Template

Default mainfbr C

#### ICE-T Exceptions Catalog D

ICE-T client program exceptions are caught by the...

...CLAIMS socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

9. The server for a distributed system as recited in claim...

...socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

18. The method as recited in claim 10, wherein authentication information ...socket is opened on the server, and the port number of the listener socket is transmitted as part of the code segment transmitted to the client computer.

27. The computer program embodied on a computer-readable medium for...

14/5,K/18 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00792377 \*\*Image available\*\*

#### METHOD AND APPARATUS FOR COMPLETING A FORM

#### PROCEDE ET APPAREIL PERMETTANT DE REMPLIR UN FORMULAIRE

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC , 901 San Antonio Road, M/S: UPAL01-521, Palo Alto, CA 94303, US, US (Residence), US (Nationality)

Inventor(s):

DIGIORGIO Rinaldo, 20 Mile Common Road, Easton, CT 06612, US,

UHLER Stephen, Mundell Way, Los Altos, CA 94022, US,

Legal Representative:

MCKAY Philip J (et al) (agent), Gunnison, McKay & Hodgson, L.L.P., 1900 Garden Road, Suite 220, Monterey, CA 93940, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200125873 A2-A3 20010412 (WO 0125873)

Application: WO 2000US27191 20001003 (PCT/WO US0027191)

Priority Application: US 99414402 19991007

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW



(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/24**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 9497

#### English Abstract

The present invention provides the user with a mechanism for completing a form. When a user issues a request for a form, that request is processed by a rewriting service. In one embodiment of the invention, the rewriting service provides the user with a mechanism for providing data to a form by obtaining data from a data source location. The rewriting service responds to a request for a form by generating a version of the form that contains embedded programs (e.g. applets). The applet elements identify the location of applets configured to obtain data from the data source location. A smart card is an example of a data source location. Access to the smart card may be controlled by the use of an authentication mechanism. The rewritten form is transmitted to a client computer where it utilizes the embedded programs to obtain data from a data source location such as a smart card.

#### French Abstract

L'invention fournit a un utilisateur un mecanisme permettant de remplir un formulaire. Lorsque cet utilisateur emet une demande de formulaire, ladite demande est traitee par un service de reecriture. Selon un mode de realisation, le service de reecriture fournit a l'utilisateur un mecanisme de fourniture de donnees a un formulaire, par obtention desdites donnees a partir d'une implantation de source de donnees. Le service de reecriture repond a une demande de formulaire par generation d'une version de formulaire qui contient des programmes incorpores (par exemple, des mini-applications). Des elements de mini-applications identifient l'implantation de ces mini-applications configurees de facon a obtenir des donnees provenant de l'implantation de source de donnees. Une carte a puce est un exemple d'implantation de source de donnees. L'accès a la carte a puce peut être commandé par un mécanisme d'authentification. Le formulaire reecrit est transmis a un ordinateur de client, ce formulaire utilisant les programmes incorpores pour obtenir des donnees provenant d'une implantation de source de donnees telle qu'une carte a puce.

#### Legal Status (Type, Date, Text)

Publication 20010412 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010823 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20020711 Late publication of international search report  
Republication 20020711 A3 With international search report.  
Search Rpt 20020711 Late publication of international search report  
Correction 20021114 Corrected version of Pamphlet: pages 1-28, description, replaced by new pages 1-28; pages 29-35, claims, replaced by new pages 29-35; pages 1/7-7/7, drawings, replaced by new pages 1/7-7/7; due to late transmittal by the receiving Office  
Republication 20021114 A3 With international search report.

#### Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/24**

Fulltext Availability:

Detailed Description

Detailed Description  
... functionality.

The WWW is a segment of the Internet that utilizes an application layer protocol called the **HyperText** Transfer Protocol (HTTP) to disseminate and to obtain information from users. HTTP is a request/response protocol used with distributed, collaborative, **hypermedia** information systems. In operation, HTTP enables one computer to communicate with another. For example referring now to...phones. Some web browsers can display several different types of files. For example, files written using the **HyperText Markup Language (HTML)**, the JavaScript programming language, the ActiveX programming language, or the Portable Document Format (PDF) may...

...It is also possible to display various other types of files using language such as Standard Generalized **Markup Language (SGML)** or **eXtensible Markup Language (XML)**.

Creating a Web Page.

A form, which provides one or more places for a user to enter...

...and/or programming languages. Most web pages, and as a result most forms, are created using the **HyperText Markup Language** 1.5 (**HTML**). The techniques used to create a web page will now be discussed in further detail.

**HTML** is a language that may be used to specify the contents of a web page (e.g. web page 220). An **HTML** description is typically comprised of a set of markup symbols which are described in more detail below. **HTML** file 250 or any type of data file that contains the markup symbols for web page 220...

...to web browser 210. Web browser 210 executing at web client 200 parses the markup symbols in **HTML** file 250 and produces web page 220, which is then displayed, based on the information in **HTML** file 250. Web page 220 may contain text, pictures, or forms comprised of embedded text fields, checkboxes...

...types of data that is to be displayed on the web client using web browser 210. Consequently, **HTML** document 250 defines the web page 220 that is rendered by web browser 210. For example, the...

...markup symbols directs web browser 210 to display a title, a heading, and an image called "image.jpg".

```
< HTML >
<HEAD>
<TITLE> This is a document title </TITLE>
</HEAD>
<BODY>
<H1> This text uses heading level one...
```

```
...com/image.jpg">
</BODY>
</HTML>
```

In the above example, markup symbols (e.g. "<" and ">") indicate where each **HTML** command (e.g. TITLE) begins and ends. An **HTML** command, which is typically surrounded by markup symbols, provides the web browser with

instructions to execute. Markup symbols typically surround an **HTML** command.

The "<" symbol indicates the start of an **HTML** command and the ">" symbol indicates the end of an **HTML** command. Each start or end command has a corresponding ">" to indicate the close of that particular command. Information associated with the **HTML** command may be contained within the **HTML** command's start and end symbols. An **HTML** command is used to by the web browser 210 to determine how to process the block of information associated with the two commands.

In the above example, "<TITLE>", and "</TITLE>" are examples of **HTML** commands surrounded by markup symbols. The "</TITLE>" **HTML** command directs web browser 210 to place the text "This is a document title" in the title bar of web browser 210.

Some **HTML** commands have attribute names associated with the command. For example, **HTML** command "<IMG>", directs web browser 210 to display an image. A "SRC=" attribute identifies the location and...

...the web server located at

"http://www-sun.com."

Embedding a Form into a Web Page

An **HTML** file may also contain **HTML** commands that cause the web browser to render a web page that contains fields for entering data...

...fields the entire web page is sometimes also referred to as a form. As is discussed below, **HTML** 1.0 includes an **HTML** form command that may cause the browser to display data entry fields. A text box, a drop...one form with the same information.

Figure 3 provides an example of, a form created using the **HTML** definition language. Code block 310 contains **HTML** command examples.

When

a document comprising code block 310 is transmitted to web browser 300 executing on...

...330, it causes form 305 to be displayed. Web browser 300 displays form 305 by parsing the **HTML** commands contained in code block 310 and then using the information obtained to format form 305. Once...

...block 310 indicates the beginning

of a form. Once the initial FORM command is placed into the **HTML** document

other **HTML** commands may be entered between the initial FORM command and the closing FORM command (e.g. </FORM...

...box and a checkbox.

```
<INPUT TYPE="text" NAME="user-name">
```

```
<INPUT TYPE="checkbox" NAME="user  
item1">
```

The **HTML** tags and text contained in code block 310, for example, create form 305 when displayed using web...execute the following shell script in response to a request 410.

```
#!/bin/sh
```

```
echo Content-type: text/ html
```

```
echo Set-cookie: FooBar=foo; expires=Wednesday,
```

```
I 0 02 99 12:00:00 GMT
```

```
echo
```

```
echo...
```

...allows 1.5 web server 450 to read the HTTP cookie.

```
#!/bin/sh
```

echo Content-type: text/ html

echo

echo The data supplied here was obtained from a

cookie:<P>

echo \$HTTP-COOKIE

Once cookie...the location

of an executable program. In one embodiment of the invention, this is accomplished by replacing XML elements (e.g. tags) that are inserted into the requested form in a standardized format with APPLETT...

...identify the location of an executable applet program. This enables browsers that are not capable of parsing XML to utilize the advantages of the present invention. The rewriting service can replace elements of one type...

...of a second

type. For example, any of the elements contained in a form (e.g. an HTML

document) may be replaced with APPLETT elements. FORM tags or INPUT tags, for example, may also be...using a variety of different computer programming languages. The invention contemplates the use of forms created

using HyperText Markup Language ( HTML ), eXtensible Markup Language

( XML ), Standardized General Markup Language (SGML), JavaScript, the Java

programming language, or any other programming language capable of generating a document that...

...generate a form. For

example, the NGLayout engine which is based on open Internet standards such

as HTML 4.0, CSS 1/2, XML 1.0, and the Document Object Model can be embedded into various execution environments and used to...embedded code configured to interact with card server 519. The rewriting service, for example,

may replace existing HTML FORM elements with APPLETT elements and thereby

provide a way for client computer 500 to obtain applets...

...referred to as a requestor.

I 0 In one embodiment of the invention, the requested form contains XML tags embedded into it. However, the form may also contain data written in other programming languages such as HTML , SGML, or any other language compatible with the protocols utilized to transmit data across a computer network...of an executable program. In one embodiment of the I 0

invention, this is accomplished by replacing XML elements (e.g. tags) that are

inserted into the requested form in a standardized format with APPLETT...

...of a second

type. For example, any of the elements contained in a form (e.g. an HTML

1 5 document) may be replaced with APPLETT elements. FORM tags or INPUT tags, for example, may...

...client computer) for display. At this point, the applets referred to in the APPLETT elements may execute.

Extensible Markup Language ( XML ) is a technology that provides a way

to separate the value of the data from the presentation of the data. The present invention also works with XML . Using XML the HTML portion of the form can be populated with XML tags.

The Applet

An applet is a small computer program configured to perform one or

more predefined...

14/5,K/19 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00765097 \*\*Image available\*\*

**A METHOD FOR CACHING XML DOCUMENTS VIEWABLE ON DEVICES WITH DIFFERENT DISPLAYS**

**PROCEDE DE MISE EN MEMOIRE CACHE DE DOCUMENTS XML POUVANT ETRE VISUALISES SUR DES DISPOSITIFS POURVUS DE DIFFERENTS AFFICHAGES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**, M/S UPAL01-521, 901 San Antonio Road, Palo Alto, CA 94303, US, US (Residence), US (Nationality)

Inventor(s):

AYYAGARI Venkata S, 175 Calvert Drive, #B201, Cupertino, CA 95014, US,

KUZNETSOV Polina, 18361 Vanderbilt Drive, Saratoga, CA 95070, US,

VALCINALP Lutfiye Umit, 1 Debbie Lane, Belmont, CA 94002, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200077668 A2-A3 20001221 (WO 0077668)

Application: WO 2000US16206 20000614 (PCT/WO US0016206)

Priority Application: US 99138685 19990614

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 5171

#### English Abstract

Systems and methods consistent with this invention provide for efficient processing, caching and routing of **XML** documents through the use of a proxy server. The proxy server is coupled to at least one client computer and a plurality of remote servers on the Internet. The proxy server is adapted in this preferred embodiment to receive a document request in the form of a uniform resource locator (URL) from a client computer and to determine whether the document is an unprocessed **XML** document. If the document is an unprocessed **XML** document, the proxy server is further adapted to search a local cache for a processed version of the document, and to transmit the processed document to the requesting client. In the event the document is not found in local storage, the proxy server is adapted to process the **XML** document, route it to the client and then store the file in local storage in anticipation of subsequent requests for the same document.

#### French Abstract

L'invention concerne des systemes et des procedes servant au traitement, a la mise en memoire et a l'acheminement efficaces de documents **XML** au moyen d'un serveur de procuration. Ledit serveur est couple a au moins un ordinateur client et a plusieurs serveurs a distance sur Internet. Dans ce mode de realisation prefere, le serveur de procuration est adapte pour recevoir une demande de document sous forme de localisateur de ressources universel (URL) d'un ordinateur client, et pour determiner si le document

est un document **XML** non traite. Si le document est un document **XML** non traite, le serveur de procuration est egalement adapte pour rechercher une memoire cache locale pour une version traitee du document, puis transmettre le document traite au client en faisant la demande. Au cas ou le document ne serait pas trouve en memoire locale, le serveur de procuration est adapte pour traiter le document **XML**, l'acheminer vers le client, puis stocker le fichier en memoire locale en prevision de demandes ulterieures du meme document.

Legal Status (Type, Date, Text)

Publication 20001221 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010315 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20021212 Late publication of international search report.  
Republication 20021212 A3 With international search report.  
Republication 20021212 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

**A METHOD FOR CACHING XML DOCUMENTS VIEWABLE ON DEVICES WITH DIFFERENT DISPLAYS**

**PROCEDE DE MISE EN MEMOIRE CACHE DE DOCUMENTS XML POUVANT ETRE VISUALISES SUR DES DISPOSITIFS POURVUS DE DIFFERENTS AFFICHAGES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Claims

English Abstract

Systems and methods consistent with this invention provide for efficient processing, caching and routing of **XML** documents through the use of a proxy server. The proxy server is coupled to at least one...

...uniform resource locator (URL) from a client computer and to determine whether the document is an unprocessed **XML** document. If the document is an unprocessed **XML** document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local storage, the proxy server is adapted to process the **XML** document, route it to the client and then store the file in local storage in anticipation of...

French Abstract

...des procedes servant au traitement, a la mise en memoire et a l'acheminement efficaces de documents **XML** au moyen d'un serveur de procuration. Ledit serveur est couple a au moins un ordinateur client...

...de ressources universel (URL) d'un ordinateur client, et pour determiner si le document est un document **XML** non traite. Si le document est un document **XML** non traite, le serveur de procuration est egalement adapte pour rechercher une memoire cache locale pour une...

...ne serait pas trouve en memoire locale, le serveur de procuration est adapte pour traiter le document **XML**, l'acheminer vers le client, puis stocker le fichier en memoire locale en prevision de demandes ulterieures ...

Detailed Description

... U.S. Provisional Application No. 60/13 8,685, entitled "Method and System for Offloading Processing of **XML** Documents to a Proxy Server" filed June 14, 1999, bearing attorney docket no. 06502  
Field of the...

...invention relates to a proxy server caching mechanism that provides a

method for retrieving, processing and storing **XML** documents 1 0 for access by an end user.

Description of the Prior Art  
Computers need to...

...on software to collect, process and disseminate data to its network users. Shortly after its inception, the **Hypertext Markup Language (HTML)** became the Web's de facto **markup language** with a set of symbols or codes that tell a Web browser how to display a Web page's content. **HTML** gained widespread popularity by providing an outstanding mechanism to deliver simple documents over the Web. It makes surfing the Web so simple, most people can effectively use it with little or no training.

Although **HTML** is the most successful electronic-publishing language ever invented, it is superficial. In essence, it describes how...

...images and push-buttons on a page, but its lack of structure creates significant barriers to using **HTML** for applications beyond simple browsing. For example, more and more people are trying to configure their Web...

...and additions have been made to the suite of software systems operating on the Internet to make **HTML** sufficiently functional. Functionality is often added in 30 **HTML** documents using Java, JavaScript, and Common Gateway Interface (CGI) programs. Unfortunately, adding functionality in this way obscures...

...this flow of incessant change, a working group of the W3 C developed a new kind of **markup language** now known as the **Extensible Markup Language (XML)**. **XML** addresses many of **HTML**'s limitations, by creating a whole new way to approach how Web sites are structured and designed...

...that content is formatted or presented, and the ways links between elements operate) may be expressed.

An **XML** document is composed of data embedded within markup tags. These tags are similar to those used in **HTML**, except that the **XML** tags may be self-defined. In other etc. The markup describes how the lines should be displayed (<B> Bold, <P> Paragraph Break, <BR> Line Break). When the **HTML** is processed by the browser, no semantics can be inferred. Consequently, the computer has no understanding of...

...30 information being rendered and therefore cannot provide meaningful insight into its contents.

Now consider a possible **XML** representation of the same information that conveys the relationship between various data objects. In the **XML** version below, the employee is described by a name, an email address, phone and fax numbers, a location, and an address. Note that each conceptual piece of information is represented by its own **XML** element, such as <EMPLOYEE>, <NAME>, and <ADDRESS>.

```
<EMPLOYEE>
<NAME>
<FIRST'>Venkata</FIRST>
<MIDDLE> S</MIDDLE>
<LAST>Ayyagari...
...201 </MAILSTOP>
<CITY>Palo Alto</CITY>
<STATE>CA</STATE>
<ZIP>94303</ZIP>
</ADDRESS>
</EMPLOYEE>
```

The advantage of **XML** in this example is that it preserves the semantics and structure of the data in a hierarchical...

...consists of first, middle, and last components, a location contains a building and a room object, etc.

**XML** representations, in further contrast to **HTML**, do not contain a description of how to display the content. **XML** instead stores the rendering (e.g., fonts, colors, leading, margins, typefaces, and other aspects of style) in an **Extensible Stylesheet Language (XSL)** document called a "stylesheet." Separating the functionality in this way allows publishers, who would often like to...

...publication and then pour it into myriad forms, both printed and electronic. Further complicating the differences between **XML** and **HTML** is the fact that a stylesheet can be associated with a client and/or a server. In other words, a server can apply a particular stylesheet to an **XML** document and then transmit the document to a client computer that also applies its own stylesheet to the document. Having an **XSL** processor on the server side means that one can make use of the flexibility and power of **XML** without having to worry about whether a particular client provides **XSL**. However, in order to take full advantage of **XML** and **XSL**, a scenario where the rendering occurs on the client side is most appropriate. Having the server send **XML** data in conjunction with **XSL** stylesheets to a client allows that client to use different stylesheets based on user preferences and the like, without having to refer back to the **XSL** stylesheet stored on the remote server. Having the client send out **XML** and **XSL** provides other benefits as well. A user is able to use a stylesheet that the server does not know about. This allows for full customization of renderings based on a user's needs. Also, **XML** on the client side allows the client to use the same data and feed it into a...

...yet another one, working on the same data, for preparing high-quality printouts. Stylesheets can also take **XML** documents and render them into multi-color, multi-font documents, braille, audible speech or any format desired simply by altering the associated stylesheet. Similar alterations to **HTML** documents could not be done without significant alterations to the underlying **HTML** program. Experts in the field believe that the change from **HTML** to **XML** has the potential to extend the Internet beyond mere information delivery to many other kinds of unimaginable human activity.

Thus, for its users, the **XML**-powered Web will be faster, friendlier and a better place to do business. Referring back to the previous example, it is obvious that a search for StN Microsystems employees using the **XML** document would be much quicker, and more accurate from a similar search of the **HTML** document. Web site designers, on the other hand, will find it more demanding. Battalions of programmers will be needed to exploit new **XML** languages to their fullest. Future Web designers will need to be versed not just in the production...

...hyperlink structures and stylesheets. Web clients correspondingly will need to possess more processing power to read an **XML** document, retrieve the appropriate stylesheet, and use it to sort and format the information on the screen...

...Web servers will become more efficient and less burdened due to the organization and efficiencies provided by **XML**, it is equally clear that the current configuration of Web clients could quickly become inundated by the multiple file access operations necessary to process a single **XML** document. This reality is particularly true with respect to "thin clients" like personal data assistants (PDAs), embedded...

...There is a need therefore for an apparatus and method that minimizes unnecessary network traffic; provides **XML** processing capability to clients not otherwise capable of such processing; optimizes processing of **XML** documents on the Internet; and prevents redundant processing of **XML** documents.



## Summary of the Invention

Systems and methods consistent with this invention provide for efficient processing, caching and routing of XML documents through the use of a proxy server.

The proxy server interfaces with at least one client...

...receive the requested document from the remote server, and to determine whether the document is an unprocessed XML document. If the document is an unprocessed XML document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local storage, the proxy server is adapted to process the XML document, route it to the client and then store the file in local storage in anticipation of...

...subject invention, the proxy server simply monitors traffic destined for a client. When it identifies an unprocessed XML document being routed to the client, the proxy server searches a local cache for a processed version of the XML document, and routes the processed document to the client, if a processed version was found. In the...

...document is not found in local storage, again the proxy server is adapted to process the XML document, route it to the client and then store the file in local storage in anticipation of...

...block diagram of the client computer of Figure 1;  
Figure 3 is a block diagram of the XML proxy server of Figure 1;  
Figure 4 is a block diagram of the remote server of Figure...

...receive the requested document from the remote server, and to determine whether the document is an unprocessed XML document.

If the document is an unprocessed XML document, the proxy server is further adapted to search a local cache for a processed version of...

...event the document is not found in local cache, the proxy server is adapted to process the XML document, route it to the client computer and then store the processed XML document in the server's local cache.

Referring first to FIG. 1, an XML proxy network system 10 is comprised of a plurality of interconnected computers and microprocessors hosting a plurality...

...be comprised of Pentium™ based microprocessors operating on Windows/NT, UNIX and/or Windows/CE operating systems. XML proxy network 10 includes client devices 100, an XML proxy server 200, and a plurality of remote server computers 300. The devices and computers, as shown...

...cable interfaces. More specifically, client devices 100 are connected to network 20 via cable interface 30, XML proxy server 200 is coupled to network 20 via cable interface 40, and remote server computers 300...

...cable 30 for providing connectivity between client computer 100 and network 20.

A detailed diagram of XML proxy server 200 is shown in FIG. 3. As with client devices 100, XML proxy server 200 is comprised of a CPU 201, a memory 202, a display adapter 206...

...storage unit 215, and a communications adapter 220. Memory 202 includes an operating system 230 and an XML processor program 232. As shown, the various components of each XML proxy server 200 communicate through a system bus 213 or similar architecture. Also, communications adaptor 220 is coupled to network interface cable 40 for providing connectivity between XML proxy server 200 and network 20.

A detailed diagram of remote server computer 300 is shown in...

...shown, remote server computer 300 is comprised of the same hardware components as client computer 100 and XML proxy server 200. In addition, stored in memory 302 is the Internet content 332 associated with remote server computer 300.

Referring now to FIG. 5, there is shown exemplary steps of XML processor program 232 for implementing the method for processing and routing XML documents in system 10 in accordance with an implementation of the present invention. Note that in this description, in order to facilitate explanation, the XML proxy server 200 is generally discussed as if it were a single device, and functions provided by the XML proxy server 200 are generally discussed as being performed by such single device.

However, XML proxy server 200 may actually comprise multiple physical and logical devices connected in a distributed architecture, and the various functions discussed below which are provided by XML proxy server 200 may actually be distributed among multiple server devices. As shown in FIG. 5, a user action in the form of a uniform resource locator (URL) is received at step 405. The XML proxy server 200 decodes the received URL and then ascertains whether the document is an XML document (step 410). For a web page this can be done by examining the URL for a reference to "XML". For a mail message this can be done by examining the multipurpose Internet mail extension (MIME) for a reference to "XML". MIME refers to an official Internet standard that specifies how messages must be formatted so that they can be exchanged between different email systems. "Text/xml" and "application/xml" are two media types that enable the exchange of XML documents with various email systems. If XML proxy server 200 determines that the document is an XML document, processing flows to step 415, otherwise processing flows to step 455. In step 415, XML proxy server 200 determines whether the document has been previously retrieved by the same or a different...

...is the document cached?) If the document is cached, processing flows to step 430 and the XML document is retrieved from the local cache 215 of XML proxy server 200. Processing then flows to step 455 and the proxy server 200 routes the document...

...flows to step 425 where the remote server 300 identifies the requested document, and routes it to XML proxy server 200. Processing flows from step 425 to step 435 where XML proxy server 200 locates and retrieves the document's stylesheet. Next, XML proxy server 200 retrieves client computer's 100 stylesheet in step 440. Processing then flows to step 445 where XML proxy server 200 applies any stylesheets to the document. Next, in step 450, XML proxy server 200 stores the processed document in local cache 215. In step 455 the document is...

...flowchart of an alternate implementation of the process used by proxy server 200 for processing requests for XML documents. In this implementation the XML proxy server 200 does not receive document requests from client computers 100. Instead, XML proxy server 200 simply monitors document flow to client computer 100 to determine whether a document is an XML document and then either routes a previously stored document to the client computer 100 or performs processing on the unprocessed XML document before routing it to the client computer 100. As shown in step 505, the process ...

...request for a document directly to the appropriate remote server 300. In step 510, proxy server 200 receives the document from the remote server 300, and in step 520, XML proxy server 200 ascertains whether the document is an XML document. As in the case of the preferred embodiment, XML proxy server 200 performs this step by examining the URL. If XML proxy server 200 determines that the document is an XML document, processing flows to step 525, otherwise processing flows to step 555. In step 525, XML proxy server 200 determines whether the document has been cached. If

the document is cached, processing flows to step 530 and the XML document is retrieved from the local cache 215 of XML proxy server 200 and processing then flows to step 555. If the document has not been cached, processing flows from step 525 to step 535 where XML proxy server 200 locates and retrieves the document's stylesheet. Next, XML proxy server 200 retrieves client computer's I 00 stylesheet in step 540. Processing then flows to step 545 where XML proxy server 200 applies one or both stylesheets to the document. Next, in step 550, XML proxy server 200 stores the processed document in local cache 215. In step 555 the document is...

#### Claim

... in local cache, further comprises the step of ascertaining whether the document is written in a second markup language, wherein said second markup language is a processed version of said first markup language.

4 The method of claim 1, wherein the step of processing the unprocessed document in accordance with...

...associated with the unprocessed document, further comprises the step of converting the unprocessed document from a first markup language to a second markup language.

5 The method of claim 1, wherein said second markup language is the extensible markup language (XML).

6 A method for processing content requests in a network having at least one content provider having...

...version of the document is located in local cache, further comprises the step of ascertaining whether the document is written in a second markup language, wherein said second markup language is a processed version of said first markup language.

9 The method of claim 6, wherein the step of processing the unprocessed document in accordance with predetermined instructions associated with the unprocessed document, further comprises the step of converting the unprocessed document from a first markup language to a second markup language.

10 An Internet Proxy server comprising:  
a memory having program instructions; and  
a processor configured to use...

...in local cache, further comprises the instruction to ascertain whether the document is written in a second markup language, wherein said second markup language is a processed version of said first markup language.

13 The server of claim 10, wherein the instruction to process the unprocessed document in accordance...

...associated with the unprocessed document, further comprises the instruction to convert the unprocessed document from a first markup language to a second markup language.

14 The server of claim 10, wherein said second markup language is the extensible markup language (XML).

15 An Internet Proxy server comprising:  
a memory having program instructions; and  
a processor configured to use...in local cache, further comprises the step to ascertain whether the document is written in a second markup language, wherein said second markup language is a processed version of said first markup language.

18 The method of claim 15, wherein the instruction to process the unprocessed document in accordance with...

...associated with the unprocessed document, further comprises the instruction to convert the unprocessed document from a first **markup language** to a second **markup language** .

19 A data processing system for processing content requests in a network having at least one content...

...client.

/8  
Remote Server Remote Server Remote Server  
A k  
300 300 300  
50 @@ 50  
40  
NETWORK **XML**  
Proxy  
20  
200  
30 -j-@ 30 30  
1  
Client Client Client  
100 100 100  
10  
FIGn 1...

...8

tart  
Get User Action 405  
IF  
410  
N roxy e eirm nes t  
equested Docu  
an **XML** Docu  
415  
s N  
age  
Cached?  
IF  
Proxy Routes Request to 420  
430 Appropriate  
Retrieve Document From...

...505

Appropriate Server  
IF  
510  
Proxy Receives Document  
From Remote Server  
520  
Is the  
N Document  
a **XML**  
Document?  
25  
s N  
Page  
Cached?  
530  
Retrieve Docurn  
Local Stora  
FIG. 6a  
FIG. 6b  
FIG. 6a...

14/5,K/20 (Item 9 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00760522 \*\*Image available\*\*

**TRANSFORMATION REGISTRY SERVICE FOR CONTENT TRANSFORMATION**

**SERVICE D'ENREGISTREMENT DE TRANSFORMATION POUR TRANSFORMATION DE CONTENU**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC** , 901 San Antonio Road, MS PAL01-521, Palo Alto, CA  
94303, US, US (Residence), US (Nationality)

Inventor(s):

YALCINALP Lutfiye Umit, 1 Debbie Lane, Belmont, CA 94002, US,  
KUZNETSOV Polina, 18361 Vanderbilt Drive, Saratoga, CA 95070, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner,  
L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200073941 A2-A3 20001207 (WO 0073941)

Application: WO 2000US14602 20000530 (PCT/WO US0014602)

Priority Application: US 99136764 19990528

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE

DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **G06F-017/30**

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14160

**English Abstract**

Methods and systems consistent with the present invention solve the inherent problems with existing **XSL** transformation systems by providing a transformation registry service that serves as a **XSL** transformation repository. The **XSL** transformation service enables **XSL** transformations in applications to deliver **XML** documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and **XSL** transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a **XML** document from an application, the application may query the transformation registry service for an appropriate **XSL** transformation for the client and its configuration. The transformation may then be applied to the **XML** document and the transformed **XML** document may be delivered to the requesting client.

**French Abstract**

Cette invention concerne des procedes et des systemes qui permettent de resoudre les problemes inherents aux systemes de transformations **XSL** , et qui offrent un systeme d'enregistrement de transformations servant de depot des transformations **XSL** . Le service de transformations **XSL** permet aux transformations **XSL** dans des applications d'acheminer des documents **XSL** a divers clients. Plus precisement, le service d'enregistrement des transformations tient a jour des mappages pour les applications, les clients et les configurations des clients. Les configurations des clients sont definies en fonction d'une application et de transformations **XSL** . Les configurations de clients permettent egalement aux applications d'appliquer ou d'etendre les transformations.

Chaque fois qu'un client demande un document XML d'une application, l'application peut se renseigner aupres du service d'enregistrement de transformations afin de trouver une transformation XSL qui convienne au client et a sa configuration. La transformation peut ensuite etre appliquee au document XML , et le document XML transforme est achemine jusqu'au client demandeur.

#### Legal Status (Type, Date, Text)

Publication 20001207 A2 Without international search report and to be republished upon receipt of that report.  
Examination 20010222 Request for preliminary examination prior to end of 19th month from priority date  
Search Rpt 20020711 Late publication of international search report  
Republication 20020711 A3 With international search report.

#### Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/30

#### Fulltext Availability:

Detailed Description

Claims

#### English Abstract

Methods and systems consistent with the present invention solve the inherent problems with existing XSL transformation systems by providing a transformation registry service that serves as a XSL transformation repository. The XSL transformation service enables XSL transformations in applications to deliver XML documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and XSL transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a XML document from an application, the application may query the transformation registry service for an appropriate XSL transformation for the client and its configuration. The transformation may then be applied to the XML document and the transformed XML document may be delivered to the requesting client.

#### French Abstract

...concerne des procedes et des systemes qui permettent de resoudre les problemes inherents aux systemes de transformations XSL , et qui offrent un systeme d'enregistrement de transformations servant de depot des transformations XSL . Le service de transformations XSL permet aux transformations XSL dans des applications d'acheminer des documents XSL a divers clients. Plus precisement, le service d'enregistrement des transformations tient a jour des mappages pour...

...configurations des clients. Les configurations des clients sont definies en fonction d'une application et de transformations XSL . Les configurations de clients permettent egalement aux applications d'appliquer ou d'etendre les transformations. Chaque fois qu'un client demande un document XML d'une application, l'application peut se renseigner aupres du service d'enregistrement de transformations afin de trouver une transformation XSL qui convienne au client et a sa configuration. La transformation peut ensuite etre appliquee au document XML , et le document XML transforme est achemine jusqu'au client demandeur.

#### Detailed Description

... relates generally to data processing systems and, more particularly, to content transformation by using Extensible Style Language ( XSL ) stylesheets  
B. Description of the Related Art  
The Internet has been hailed the marketplace of the future...

...that reside on Internet (Web) servers. Web clients and Web servers

communicate using a conventional protocol called " **HyperText** Transfer Protocol" (HTTP).

In operation, a browser opens a connection to a server and initiates a request...

...Locator (URL). The server delivers the requested document, typically in a standard coded format such as the " **HyperText Markup Language** " ( **HTML** ) format. The **HTML** formatting language incorporates text and graphics into a document by using "tags." **HTML** tags are codes that identify elements in a document, such as headings or fonts, for the purpose of formatting information in the **HTML** document. For example, the tag "<BOLD>" indicates that the text should appear bold face. In **HTML** both the tag semantics and the tag set are fixed. An <h1> tag is always a first...

...is meaningless.

The World Wide Web Consortium (W3C) (<http://www.w3.org>) has extended the definition of **HTML** to allow new tags to keep pace with changing technology and to bring variations in presentation, such...

...how to translate the logical structure of a source document into a presentation structure (e.g., display **hypertext** links in blue, speak emphasized text in a louder voice, or number figures sequentially). However, these changes...

...INTERNET EXPLORER are not useful.

In response to this limitation the WK instituted a new formatting language, **Extensible Markup Language** ( **XML** ), that specifies neither semantics nor a tag set. **XML** is a restricted form of the Standard Generalized **Markup**

**Language** (SGML) that is more suitable to the Web. SGML is defined by ISO 8879. **XML** is a meta-language for describing **markup languages** . In other destination each.

**XML** documents may be provided to different clients with varied interests and capabilities. For example, a Personal Digital...

...a particular document than that of a Personal Computer (PC) running NETSCAPE NAVIGATOR  
The Extensible Style Language ( **XSL** ) is one style language used by **XML** which allows different clients to receive the same **XML** documents in different formats. **XSL** is defined by the WWW Consortium. The Extensible Style Language Transformation ( **XSLT** ) language, as part of **XSL** , allows an **XML** document to be transformed to another document. The **XSL** specification separates style from content when creating **XML** documents. **XSL** also allows an **XML** document to be transformed to another **XML** document by allowing content transformation. To use **XSL** with **XML** documents, a developer creates an **XSL** stylesheet that describes the transformation of a document written in **XSL** language, and applies the transformation to multiple **XML** documents using an **XSLT** processor. Throughout the specification, **XSL** transformations are defined as the process that transforms the document by 1 5 using an **XSL** stylesheet.

Although an **XSL** transformation enables developers to transform a particular document to different **XML** documents, the transformations may be limited if the transformation specific for the application is

hard-coded into the application itself. For example, an **XML** document may need to be transformed and/or styled based on different clients of different applications. Each time an application needs to specify a different type of **XSL** transformation for a new type of client, the application must be recompiled and/or restarted. Thus, as...

...costly within an application that resides on an application server. It is therefore desirable to improve existing **XSL** transformation systems to provide automatic transformations for new types of clients and configurations unrelated to the application...

#### ...OF THE INVENTION

Methods and systems consistent with the present invention solve the inherent problems with existing **XSL** transformation systems by providing a transformation registry service that serves as a **XSL** transformation repository.

The **XSL** transformation service enables **XSL** transformations in applications to deliver **XIVIL** documents to various clients. Specifically, the transformation registry service maintains mappings for applications, clients, and client configurations. The client configurations are defined based on an application and **XSL** transformations. The client configurations also allow applications to apply or extend transformations. Each time a client requests a **XIVIL** document from an application, the application may query the transformation registry service for an appropriate **XSL** transformation for the client and its configuration. The transformation may then be applied to the **XML** document and the transformed **XIVIL** document may be delivered to the requesting client.

Additionally, the transformation registry service provides a facility for developers to enable their applications, to publish and register new **XSL**

transformations, to obtain information for existing transformations, and retrieve **XSL** stylesheets instead of hard-coding the transformation within the application.

The transformation registry service also allows various...

...a flow chart of the steps performed by the data processing system of Fig. 1 when providing **XML** documents to clients in a manner consistent with the present invention.

#### DETAILED DESCRIPTION

The following detailed description....

...Systems and methods consistent with the present invention provide a transformation registry service for developers to publish **XSL** transformations for specific clients and applications, such as applications running on servers. A developer uses an interface associated with the transformation registry service to register applications that require content transformations (of **XML** documents) on a server, to register clients associated with an application, and to provide mappings between the clients and stylesheets. Each stylesheet describes one or more transformations to apply to an **XML** document.

Systems and methods consistent with the present invention enable applications that provide **XMIL** documents, such as a calendar application, to provide different **XML** documents based on the type of client. By enabling applications to interact with the transformation registry service...

...tailored for that specific client. For example, a PDA client, with specific memory requirements, may receive an **XML** document containing limited textual information, and possibly no graphical or audio information. On the other hand, a...



...receive an XML document containing full content. In another example, a client capable of using the **Hypertext** Transport Protocol (HTTP) may receive XML documents in an HTTP format.

As explained, the transformation registry service...

...URL from an application. Based on the client type, the application queries the transformation registry service for an **XSL** transformation for that application, client type, URL, and client configuration. The client type, URL and client configuration... More information on the client lookup service is described below. The transformation registry service locates the appropriate **XSL** transformation for the client requesting the URL and returns the **XSL** transformation to the application. To do this, the application queries the transformation registry service to find a...

...an XML document to be transformed.

The transformation registry service provides a number of benefits over traditional **XSL** transformation systems. The transformation registry service maintains **XSL** transformations for multiple applications, clients, and configurations. This way, any type of client may request and receive data in a format suitable for that type of client. Each time a client requests an **XML** document from an application, the transformation registry service provides an appropriate transformation for that client and document...

...registry service provides a facility to represent content in the registry as an XML document, to publish **XML** documents as the content of the registry, to receive additional content as **XML** documents. This may be done through an interface, such as a Web interface. The transformation registry service also provides a programmable interface for developers to access and submit queries for available **XSL** transformations. Applications may update the registry with new **XSL** transformations by accessing the interface. Applications may create a definition for new applications and clients, create multiple...

...request information from and submit information to application server 104, such as weather reports, spreadsheet data, or **XML** documents formatted for client 102.

Application server 104 may host any application (e.g., calendar application, or weather service) that interfaces with clients 102 using **XML** documents 106. Depending upon the type of client requesting an **XML** document 106, application server 104 returns the appropriate **XML** document 106. For example, application server 104 may include the Java Embedded Server (JES), available from Sun Microsystems, Inc. **XML** documents 106 may be located at various locations in network 110. **XML** documents 106 may also be stored in application server 104.

Figure 2 depicts a more detailed...

...320, and an optional video display 322. Memory 302 includes application 304, transformation engine 306, registry 308, **XSLT** service 310, and client lookup service 312. Application 304 receives client requests and provides **XML** documents 106 to those clients.

Transformation engine 306 maintains mappings for all **XSL** stylesheets, responds to queries from application 304, publishes new registries 308, and runs an informative servlet that shows the content of registry 308. A mapping refers to a relationship between each of the **XSL** stylesheets and any other element (e.g., application, client, configuration). A servlet is a program such as...

...306 are described below.

Also included in memory 302 is registry 308. Registry 308 contains the various **XSL** transformations for clients, configurations, and applications. An exemplary data model for registry 308 represented as a tree...XIVIL document (or a set of documents) that may be requested by a client 102, and an **XSL** stylesheet 410 describes a transformation to apply to an **XML** document of a particular configuration 406 to obtain the final transformed document.

One skilled in the art will appreciate that more than one **XSL** stylesheet may be used for a single URL.

Memory 302 also contains an Extensible Style Language Transformation (**XSLT**) service 310. **XSLT** service 310 is a service that applies an **XSL** transformation to an **XML** document given a stylesheet written in **XSL**. **XSLT** service 310 applies **XSL** transformations to **XML** documents 106.

Finally, memory 302 contains a client lookup service 312 used to map a protocol request...

...memory 302. An exemplary representation of static registry 316 parallel to registry 308 is depicted as an **XML** document in Figure 4B that describes a weather report application having a sprinkler, thermometer, and two different...

...of a default application 402, client 404, and configuration 406 that applies a generic stylesheet to an **XML** document 106. Each entry name is associated with by a default entry ("").

For example, if a configuration...the markup tags within the XIVIL document will be interpreted by an application presenting the document. Each **XML** representation in registry 308 utilizes a specific DTD. Figures 4D-4E depict exemplary DTDs for use with...

...for matching configurations in various applications, or clients. This interface may be used to locate an appropriate **XSL** transformation for a requesting client and application.

Interfaces DuplicateConfigurationException, ElementAttachedException, 0 and RegistryDefinitionException return error codes when...

...static registry 316 may be created by a text editor or if desired by any well-known **XML** authoring tool. **XSL** stylesheets are also created for multiple applications 304 (step 504). Once static registry 316 and **XSL** stylesheets for all applications 304 are created, a developer may use the TransformationRegistryService API to load (publish) static registry 316 and the **XSL** stylesheets into registry 308 (step 506). By loading static registry

316, any content already in registry 308 is deleted. In an alternative embodiment, registry 308 may contain links (e.g., URLs) to the specified **XSL** stylesheets. Also in step 506, application(s) 304 may be installed on application server 104. Once application...

...s) 304 may begin providing XIVIL documents 106 to requesting clients 102.

Once registry 308 contains the **XSL** stylesheets, transformation engine 306 may be initiated (step 508). That is, the developer may call the TransformationRegistryService...

...316 as an XIVIL document containing an application definition containing clients, configurations and stylesheets (step 522). An **XSL** stylesheet may also be created for a particular application 304 (step 524).

Once static registry 316 and a **XSL** stylesheet for an application 304 is created, a developer may use the TransformationRegistryService API to

load (publish) static registry 316 and the **XSL** stylesheet into registry 308 (step 526).

Unlike new applications branch 500, by loading static registry 316, any installed on application server 104. Once registry 308 contains the **XSL** stylesheets, transformation engine 306 may be initiated (step 528). Similar to application branch 500, transformation engine 306 next enters a "ready" state.

In one example consistent with the present invention, a developer prepares an **XML** representation of the registry and utilizes a servlet that installs an **XML** document from static registry 316 to registry 308. This may be used when initially loading registry 308...

...308. Since each application 304 is partitioned in registry 308, application 304 may specify new clients and **XSL** transformations without disturbing existing **XSL** transformations.

Regist[y Service

As shown in Figure 6, the transformation registry service is initiated, for example, by application 304 receiving a request from a client 102 for an **XML** document 106 (step 602). The request includes information pertaining to that client. For example, a HTTP request...

...a default configuration or best match is supplied), application 304 may query transformation engine 306 for an **XSL** transformation based on the client type, configuration, and application (step 606).

Alternatively, application 304 may query transformation...  
...may be put in place of all parameters.

Once application 304 queries transformation engine 306 for an **XSL** transformation, transformation engine 306 traverses registry 308 for one or more 1 0 appropriate **XSL** stylesheets and configurations for the requesting client (step 608). It may be that the requesting client requires multiple **XSL** stylesheets to display the XIVIL document.

For example, the application may query transformation engine 306 for configurations...

...this client configuration 406 from registry 308.

Transformation engine 306 then supplies application 304 with the appropriate **XSL** stylesheets(s) (step 610). For example, transformation engine 306 may return a pointer (e.g., URL) to **XSL** stylesheet 410, or may return the complete stylesheet 410 that correspond to the **XSL** transformation to apply.

Once received, application 304 may invoke a XSILT service 310 (step 612). XSILT service 310 applies received **XSL** stylesheets 410 to the requested XML document 106. If more than one stylesheet 410 needs...  
...consistent with the present invention  
provide a transformation registry service that is a transformation repository for multiple **XSL** stylesheets.

Although aspects of the present invention are described as being stored in memory, one skilled in...

...node of the Transformation Registry hierarchy. An Application has Clients, each of which has Configurations that specify **XSL** transformations. These transformations are used to change data (requested by a client) into a form appropriate for...transformregistry  
Interface Client  
public interface Client  
Clients belong to an Application and specify configurations. Each

configuration specifies **XSL** transformations to be applied when the Client matching that Configuration requests a URI.

Client names must be...service.transformregistry

Interface Configuration

public interface Configuration

A Configuration of a Client defines a set of transcodings ( **XSL** transformations) to be used when Clients request data.

A Configuration may have a name, which must be...

...available from the enclosing Client.

Field Summary

static int am

Source node applies to either YJVllL or **HTML**

static int **HTmL**

Source node applies to **HTML**

static int -am

Source node applies to **XML**

Appendix A

Method Summary

Configurati= getcopy(java.lang.String name, java.lang.String description)

Create a deep...

...java.util Enumeration cretParamName O

java.util Enumeration cretTransformations(java.lang.String sourceURI, int type)

Find the **XSL** transformations to be applied on the document at the given source LTRI.

b,,l,a, isDefaultConficruration O...

...String sourceURI,

int type, java.util Enumeration transfOMB)

Set the transformations for a source URI.

Peld Detail

**XML**

public static final int **XML**

Source node applies to **XML**

.....

**HTMEL**

public static final int **HTML**

Source node applies to **HTML**

. ....

ANY

public static final int ANY

Appendix A

Source node applies to either **XML** or **HTML**

0

Method Detaff

getName

public java.lang.string getNameo

Returns.

The name of the Configuration

....-.....  
.....-....

getDescription

public...

...the URI should be fully qualified (with the exception of localhost).

type - The type of the source ( **XML** , **HTML** , ANY).

transforms - The list of transformations to apply. Each element should be a String URI.

removeTransformationsForSource...

...URI should be fully qualified (with the exception of localhost).  
type - The type of the source (XMI, HTML, ANY).

getTransformations  
public java.util.Enumeration getTransformations(java.lang.String  
sourceURI,  
int type)  
Find the XSL transformations to be applied on the document at the given  
source URI.

Parameters.

source - The document's URI.

type - The type of the source (XML, HTML)  
Returns.

An enumeration of XSL transformations (Strings) for the transcoding  
whose source best matches the given source. The best match is the...to an  
Application and specify configurations.

Configuration A Configuration of a Client defines a set of transcodings  
(XSL transformations) to be used when Clients request data.  
rationOu A ConfigurationQuery is used to fill in all...

...the Client.

T  
ran@formationftjsta@&ctoiy A factory for Transformation Registry  
elements.

The Transfon-nationRegistryService stores the XSL transformations  
Transfo ationRgoi lmyend" necessary for various client configurations and  
applications.

Exception Summary  
Exception thrown by Conf...rather than hard-coding them within  
applications or services. Transformations can also be performed  
automatically by the XML proxy for registered clients.

Transformation Registry Data Model  
The transformation registry can be represented as a tree...

...B 2 -@@-F-X-S-L-k  
@@L I  
it F-De-f-au\lt--li L@@. XSL  
Default lent -lconfiaurationorill XSL  
Application XSL  
Configurations specify  
mapping from source  
Registry has Applications Clients have URLs to a list of XSL  
Applications have Clients Configurations transformations  
The registry can be queried in accordance with this data model: each...

...removed from each node.

Lastly, the registry (or any single application) may be published by  
using an XML document to describe the registry (or application)  
contents.

Transformation Registry AN  
The Transformation Registry API has three...

...a client configuration, and finally specifying the requested URL. This provides the application with a list of **XSL** transformations to be applied. The application may then use the **XSLT** service to perform those transformations.

..... --T . . . . .  
..... @ . 11  
11I.....-.....I.....  
.....-..... 1- . . .  
.....

Overview Package Class Inheritance Deprecated Index Header

PREVPACKAGE...METHOD

com.sun.lhs.service.transformationregistry

Interface TransformationRegistryService

public interface TransformationRegistryService

extends Service

The TransformationRegistryService stores the **XSL** transformations necessary for various client configurations and applications. There are three ways to modify the registry.

Publish...

...is running.

void publish (java.net.URL configurationDocument)

Publish a document to the TransformationRegistryService that specifies the **XSL** transformations to be applied for various clients, applications and configurations.

Void publishApplication (java.net.URL configurationDocument...

...void publish (java.net.URL configurationDocument)

throws RegistryDefinitionException

Publish a document to the TransformationRegistryService that specifies the **XSL** transformations to be applied for various clients, applications and configurations. If the configuration document is valid, it...

Claim

... a canonical form in the registry.

12 The method of claim 1, wherein the stylesheet is an **XSL** transformation.

13 The method of claim 1, wherein a stylesheet corresponds to at least one application.

14...

...receiving a request from a client for an XML document;

querying a transformation registry service for an **XSL** transformation corresponding to the client request;

receiving from the transformation registry service information corresponding to an **XSL** transformation; and

invoking an **XSLT** transformation service to apply the received **XSL** transformation to the XML document.

21 The method of claim 20, further comprising the step of requesting a listing of available **XSL** transformations from the transformation registry.

22 The method of claim 20, further comprising the step of registering **XSL** transformations in the transformation registry.

23 The method of claim 20, wherein the request includes information

associated...a canonical form in the registry.

36 The system of claim 24, wherein the stylesheet is an **XSL** transformation. . The system of claim 24, wherein a stylesheet corresponds to at least one application.

38 The...

...providing an XML document to a client, comprising:  
a transformation registry service that receives queries for an **XSL** transformation corresponding to a client request;  
an application that receives requests from a client for an XML document and that receives from the transformation registry service information corresponding to an **XSL** transformation; and  
an **XSLT** transformation service that applies the received **XSL** transformation to the XML document. . The system of claim 40, wherein the application further requests listings of available **XSL** transformations from the transformation registry service.

46 The system of claim 44, wherein the application further registers **XSL** transformations in the transformation registry service.

47 The system of claim 44, wherein the request includes information claim 49, wherein the stylesheet is an **XSL** transformation.

59 The computer readable medium of claim 49, wherein a stylesheet corresponds to at least one...

...MEMORY

314

304 Secondary

Application Storage

Device 316

306 Static

Transformation Registry

Engine

308

Registry

310

318

**XSLT** Service CPU

312

Client Lookup

Service

322 320

Video Display Input Device

FIGn 3

Application Client

A...

...CONFIGURATION>

- <TRANSCODING>

408 -,f--<SOURCE url="\*" />

410 @@TRANSFORIVI

url="http://localhost:8080ONVeatherServiceinfo/examples/weather/weatherservice/resources/mozilla. xsl " />

<TTRANSCODING>

</CONFIGURATION>

4CB,j@- <CONFIGURATION>

<PARAM name="version" value="1.111 />

<PARAM name="osname" value="Windows CE" />

- <TRANSCODING>

<SOLIRCE url="\*" />

410,,f@<TRANSFORIVI

```

url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/wince. xsl " />
<TRANSCODING>
</CONFIGURATION>
</CLIENT>
4C4@@- <CLIENT name="sprinkler`5
<CONFIGURATION name="*`5
- <TRANSCODING>
408 -@@ <SOURCE url="*" />
4110-,J@-<TRANSFORIVI
url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/sprinkler. xsl " />
</TRANSCODING>
</CONFIGURATION>
404 -,f@- </CLIENT>
406,,r@- <CLIENT name="thermometer>
- <CONFIGURATION name="*`5
- <TRANSCODING>
408 -,r@<SOURCE url="*" />
410 -,f---<TRANSFORM
urf="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/thermometer. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
404,j@- <CLIENT name="weather-vane">
406 @- <CONFIGURATION name="*">
- <TRANSCODING>
408 -,f-@<SOURCE url="*" />
41 0 -,f--<TRANSFORM
url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/weather-vane. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
404 -.@- <CLIENT name="humidity`5
406 <CONFIGURATION name="5
<TRANSCODING>
408 -,J@-<SOLIRCE urf="*" />
410-,j-@<TRANSFORM
url="http://localhost:8080[WeatherServiceInfo/examples/weather/weatherser
vice resources/humidity. xsl " />
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
</APPLICATION>
FIG. 4B
R:WAM1NERM16502k0253V,gs.vsd
316
<REGISTRY>
<APPLICATION.name="" description="generic application...

```

```

...configuration">
<!-- no parameters needed for this configuration -->
<TRANSCODING>
<SOURCE url="*" />
<TRANSFORM url="http://localhost:8080/WeatherServiceInfo/examples/weather/weatherser
vice/resources/preftty-print. xsl " />@@ 452
</TRANSCODING>
</CONFIGURATION>
</CLIENT>
</APPLICATION>
</REGISTRY>
FIGm 4C
<!-- DTD, Application Publishing, Transformation Registry for LI
<!-- ELEMENT APPLICATION...

```

...Registry



For Multiple Changes to Registry For One Application  
 Applications  
 504 524  
 I F I F  
 Create XSL  
 Stylesheets For Create XSL Stylesheet  
 Multiple Applications For One Application  
 506 526  
 IF IF  
 Publish Static Registry Publish Static Registry  
 And...  
 ...10  
 Begin  
 Receive Client Request 602  
 IF  
 Determine 604  
 Client Type  
 IF  
 Query Transformation Registry  
 Engine for XSL Transformation @@606  
 Based on Client Type  
 I  
 Registry Engine Determines  
 Proper XSL Transformation 608  
 Based on Client and  
 Configuration  
 Receive XSL Transformation  
 From Registry Engine  
 Invoke XSLT Service and Apply 612  
 XSL Transformation  
 Send Transformed XML  
 Document to Client  
 FiGm 6

14/5,K/21 (Item 10 from file: 349)  
 DIALOG(R)File 349:PCT FULLTEXT  
 (c) 2003 WIPO/Univentio. All rts. reserv.

00740829 \*\*Image available\*\*

**EXTENDING THE CAPABILITIES OF AN XSL STYLE SHEET TO INCLUDE COMPONENTS  
 FOR CONTENT TRANSFORMATION**

**EXTENSION DES CAPACITES D'UNE FEUILLE DE STYLE XSL AFIN D'INCLURE DES  
 COMPOSANTS PERMETTANT DE TRANSFORMER LES CONTENUS**

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC , 901 San Antonio Road, MS PAL01-521, Palo Alto, CA  
 94303, US, US (Residence), US (Nationality)

Inventor(s):

YALCINALP L Umit, 1 Debby Lane, Belmont, CA 94002, US,

Legal Representative:

GARRETT Arthur S (agent), Finnegan, Henderson, Farabow, Garrett & Dunner,  
 L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200054174 A1 20000914 (WO 0054174)

Application: WO 2000US6379 20000313 (PCT/WO US0006379)

Priority Application: US 99123916 19990312; US 2000523378 20000310

Designated States: JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: G06F-017/21

International Patent Class: G06F-017/22 ; G06F-017/30

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7596

#### English Abstract

Systems and methods consistent with the present invention use a Namespace paradigm to define an external component reference to a style sheet (500). When the style sheet processor processes the tags in the style sheet, it recognizes the external component declaration (510). The style sheet will contain a name of the external component instance and a definition of the method to execute associated with the external component instance which is executing (520). The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet (525). The results of the method's execution may be placed in the transform document generated by processing the style sheet (530).

#### French Abstract

L'invention concerne des systemes et des procedes utilisant un paradigme d'espace de noms pour definir une reference de composant exterieur concernant une feuille de style (500). Lorsque le processeur de feuille de style traite les etiquettes sur la feuille de style, il reconnait la declaration de composant exterieur (510). La feuille de style contiendra un nom de l'instance de composant exterieur et une definition du procede a executer associe a ladite instance. La feuille de style contiendra un nom de l'instance de composant exterieur et une definition du procede a executer associe a ladite instance en cours d'execution (520). Le processeur **XSLT** abandonne ensuite le controle au composant exterieur afin d'executer le procede defini sur la feuille de style (525). Les resultats de l'execution du procede peuvent etre places dans le document de transformation genere par le traitement de la feuille de style (530).

#### Legal Status (Type, Date, Text)

Publication 20000914 A1 With international search report.  
Examination 20010215 Request for preliminary examination prior to end of 19th month from priority date  
Correction 20010621 Corrections of entry in Section 1: under (30) replace "Not furnished" by "09/523,378"  
Republication 20010621 A1 With international search report.

#### EXTENDING THE CAPABILITIES OF AN XSL STYLE SHEET TO INCLUDE COMPONENTS FOR CONTENT TRANSFORMATION

#### EXTENSION DES CAPACITES D'UNE FEUILLE DE STYLE XSL AFIN D'INCLURE DES COMPOSANTS PERMETTANT DE TRANSFORMER LES CONTENUS

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/21

International Patent Class: G06F-017/22 ...

... G06F-017/30

Fulltext Availability:

Detailed Description

Claims

#### English Abstract

...definition of the method to execute associated with the external component instance which is executing (520). The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet...

#### French Abstract

...une definition du procede a executer associe a ladite instance en cours d'execution (520). Le processeur **XSLT** abandonne ensuite le controle au composant exterieur afin d'executer le procede defini sur la feuille de...

#### Detailed Description

EXTENDING THE CAPABILITIES OF AN **XSL** STYLE SHEET TO INCLUDE COMPONENTS FOR CONTENT TRANSFORMATION

RELATED APPLICATIONS

Provisional U.S. Patent Application No. 60/123,916 entitled "Enhanced

**XML** Processing for Content Transformation" filed March 12, 1999, is relied upon and is incorporated by reference in...

...style sheets in creating a document, and more particularly, to the use of external components in an **XSL** style sheet.

Description of the Related Art

Systems' and applications' use of documents has become so prolific...

...documents' display. Style sheets provide greater flexibility and control over the display of a document's content. **XSL** style sheets also allow the content of documents to be transformed, making them as document transformers where...

...a new document incorporating the information contained within the style sheet and the requested document.

Typically, an **XSL** style sheet includes the use of tags. Tags are codes that identify an element in the document...

...advanced, to include a type of programming language. An example of this is an Extensible Style Language ( **XSL** ) style sheet. **XSL** is a declarative style sheet language specified in **Extensible Markup Language** ( **XML** ) which can also be used to transform **XSL** documents. The **XSL** is actually more analogous to a programming language than to a mechanism designed purely to analyze tags and display attributes.

With **XML** , developers may provide functionality by creating their own customized tags. For example, **XML** supports links that point to multiple documents, as opposed to **HTML** links, which can reference just one destination each.

**XML** documents may be served to different clients with varied interests and

capabilities. For example, a PC running NETSCAPE may require a document formatted differently than a PDA would. **XSL** is the style language used by **XML** to allow different clients to receive different **XML** documents.

**XSL** is a specification language for separating style from content when creating **XML** or **HTML** pages. **XSL** style sheets allow a single style to be applied to multiple documents.

However, there are limitations to...

...be used to aid in the modification of document information to be displayed.

Similarly, the use of **XSL** style sheets has been limited. Information contained within the **XSL** style sheet must be defined within the application and the **XSL** style sheet itself, and therefore the style sheet becomes application dependent. This sometimes is not desirable when ...

...in which case a separate style sheet for each application would need to be developed.

Furthermore, the **XSL** style sheet is completely self-contained in that no modules or functions can be called outside the...

...component may generate application specific results. In addition, the style sheet may contain commands written in an **XSL** format.

The step of processing the method associated with the external component may include loading the external component in an **XSLT** processor and initiating the execution of the method associated with the external component. In addition, the step...instance of the external component may also be performed. The external component may be defined to an **XSLT**

processor and the style sheet using a Namespace. And, an application associated with an input document using...

...component to the style sheet and the style sheet processor. The style sheet processor may be an **XSLT** processor and the style sheet contains tags written in an **XSL** format.

And finally, the style sheet processor may be further operative to generate a transform document and...

...consistent with exemplary embodiments of the present invention; Fig. 2 depicts a more detailed view of an **XSLT** processor and components related to the **XSLT** processor suitable for practicing methods and systems in a manner consistent with an exemplary embodiment of the...

...an external component to a style sheet. Namespaces are covered in more detail by the "Namespaces in **XML**" recommendation specification by the World Wide Web Consortium. When the style sheet processor processes the tags in...

...component, and may contain arguments for the method which is executing. The style sheet processor, or the **XSLT** processor in one embodiment, then relinquishes control to the named external component instance to execute the method...

...required, and this execution may provide any results including those not related to the document.

During processing, **XSL** external components may treat the document specific tags as its input declared by specific Namespaces that designate ...

...external component which are also declared with respect to a particular Namespace will be recognized by the **XSLT** processor during the validation of a style sheet as declarations of component invocations. During the processing of a document with a style sheet, an **XSLT** processor will use the component specification along with arguments defined in the **XSL** style sheet to perform the external component method defined to the **XSLT** processor associated with the particular component.

The specific instances of a component may designated by a name...

...the external component's instance which generates a result and placing the result in a document. The **XSLT** processor also ensures that a global processing context which is initialized during the validation step by the **XSLT** processor and can be shared by all the components and their instances referenced within a style sheet...

...of generating fragments of a transformed document. The generated result may depend on the context which the **XSLT** processor supplies to the component's instance. Multiple components or component instances can share the context during...

...8, and a video display 120.

Memory 102 includes application 104, transformation engine 106, registry 108, and **XSLT** processor 110. Application 104 receives client requests and provides **XML** documents to those clients. Transformation engine 106 maintains mapping of all **XSL** translations, responds to queries from application 104, publishes new registries, and runs an informative servlet. A servlet...

...the registry without the need for additional software to interface with the file.

Memory 102 contains an **XSLT** processor 110 that applies the **XSL** transformation to **XML** document 1. Secondary storage device 112 contains

a  
registry as **XML** Document 1 1 4. This registry 1 1 4 is an **XML** representation of registry 108. Registry 1 1 4 serves as a backup that may be easily loaded into memory 102.

Figure 2 depicts a more detailed view of an **XSLT** processor and components related to the **XSLT** processor suitable for practicing methods and systems in a manner consistent with an exemplary embodiment of the present invention. The **XSLT** processor 205 interfaces with multiple modules in order to process an external component declared within a style sheet. The user 200 may request a document and may provide to the **XSLT** processor 205 a client type. For example, the user client type might be a PDA or a browser on a PC. The **XSLT** processor will process this request, and when complete, will send to the user a transform document.

The **XSLT** processor may perform many functions, several of which are depicted in Figure 2. A validation module 2...

...to ensure that the correct style sheet to generate a transform document is used and valid. The **XSLT** processor will also understand the external component declarations specified with Namespaces in the style sheets and load...

...will also incorporate the results of any methods executed by an external component instance, if any. An **XML** Parser 235 may be used to parse the input documents and style sheets. An **XML** Document Builder 240 may be used to build a memory representation of the parsed documents or transformed documents.

To generate this display document, in one embodiment, the **XSLT** processor

205 accesses style sheets 220, components 225, and content, e.g., **XML** documents 230. These style sheets 220, components 225, documents 230, may be contained in memory within the...

...system described with respect to Figure 1, in secondary storage or in other storage areas which the **XSLT** processor 205 can access.

As stated, the user will generate a document request. The **XSLT** processor 205 will recognize, by examining the document request, an associated style sheet. The **XSLT** processor 205 then retrieves the appropriate style sheet associated with the document requested in order to process...

...way of a Namespace paradigm. When the style sheet names a reference to an external component, the **XSLT** processor may create an 1 5 instance of the component if the named component instance has not been created, or use an already created component instance by looking it up with its name. The **XSLT** processor may pass any arguments also defined in the style sheet and initiate the specific method execution...

...i.e., those documents that contain the content of the document requested by the user, which the **XSLT** processor will use in conjunction with the style sheet to generate a transform document.

Figure 3...

...present invention, the style sheet does not have to be application dependent. The style sheet may contain **XSLT** language commands as well as reference to an external component. This external component may be used to...perform various other types of processing.

After processing the external call embedded in the external component, the **XSLT** processor continues to process the rest of the style sheet and the input document. Other methods of...

...style sheet might be activated as described above. When the style sheet

is completely processed by the **XSLT** processor, the process sends a transform document containing the results of the external call to the user...

...using a PC or other type of data processing system by which he has access to the **XSLT** processor. The **XSLT** processor receives the document request and client type from the user and validates the document and the...

...sheet associated with the document (step 405). As part of the validation process, in one embodiment, the **XSLT** processor validates a document by using an **XML** parser and validates a style sheet by using an **XML** parser and using the **XSL** language. **XSL** style sheets are written using the **XSL** language which is described in **XML**.

The **XSLT** processor then receives the style sheet containing reference to an external component (step 410). The style...

...elements in a style sheet. Name attributes within the scope of a component identification element in the **XSLT** style sheet designate a specific instance of a particular component.

The external component may contain a definition...

...be placed within the external component. The component can also utilize a processing context passed by the **XSLT** processor.

The process then checks to see if an instance of the external component already exists, i.e., is active, in the **XSLT** processor (Step 412). If it is determined that an instance is not found in Step 413, then...

...Consequently, the name of the external component may play an important role in this process. If the **XSLT** processor has encountered this named component instance before, it locates and reuses the same component instance. Otherwise...

...processed by the style sheet will be passed to the external component that is being activated. The **XSLT** processor, when processing the style sheet, relinquishes control to the instance of the component so that it ...

...the method defined in the style sheet. After that method has been completed, processing returns to the **XSLT** processor to continue processing the style sheet and hence the input document.

Once all the tags in...

...as well as any other method(s) associated with external components contained in the style sheet, the **XSLT** processor then places in a transform document the results of the tag processing as well as the... activation in a style sheet.

Next, during the validation of the style sheet and processing of the **XSLT** tags, an external component identified by the specific Namespace declaration is identified and is defined to the **XSLT** processor (step 505). The use of Namespaces is well known to those skilled in the art. The...

...know the location for their retrieval. In the present invention, a component Namespace is defined to an **XSLT** library so that during the execution of the style sheet, the **XSLT** processor is aware that an external component is being defined, and it can preload and resolve components which are declared.

Following definition of an external component Namespace to the **XSLT** processor and after validation of the style sheet is finished, the **XSLT** processor starts processing an input document with the validated style

sheet and the loaded components. It processes the **XSL** language tags based on the language semantics and transforms the document in the process. When a component...

...be processed in the style sheet during the style sheet processing with the control flow of the **XSL** language, the **XSLT** processor looks up the named instance of a component which is specified by the component tag. The...

...uses it (Step 510), where it is processed. If the instance already exists, however, the **XSLT** processor reactivates the named instance. Within the external component tag, in one embodiment, is a method definition...

...received from the style sheet (Step 515). This is an indication to the style sheet processor, the **XSLT** processor, that the following text associated with the component tag is for an external component associated with...

...tag within the application. When the special component tag is encountered, its contents will signal to the **XSLT** processor to relinquish control so that a method defined to the external component's named instance may...

...is called (step 522). Any values defined in the style sheet for the method received by the **XSLT** processor are then passed to the specific named method (step 525) as the arguments of the method in the component. The specific method will use the values passed from the **XSLT** processor as its arguments. This step can use the methods specified in the named external component.

A global context which the **XSLT** processor passes to the components to utilize and the current document fragment being processed by the style...

...being processed as selected by the style sheet; 2) the global context that is provided by the **XSLT** processor; and 3) a means for creating document fragments in the transformed 15 document that is...

...either by requiring those three additional items to be included in the method signatures by allowing the **XSLT** processor to pass them to the component instance, or by requiring the component to use a specific...

...their own state when they are reactivated to allow them to provide intelligence in document transformation.

The **XSLT** processor is not aware of the functions being performed by processing the external component nor is it...method execution in the external component instance. When the component instance's method returns execution to the **XSLT** processor, it resumes processing the document as specified in the style sheet. The **XSLT** processor during processing the style sheet may require to reuse the named component instance or activate other components instances as specified by the style sheet.

The **XSLT** processor may also perform error handling. The **XSLT** processor may record the method invocations if the method signatures in the named component does not match...

...errors are generated, the component will abort its execution and return a list of exceptions to the **XSLT** processor. Depending on the severity of the errors, the **XSLT** processor may log this as an error and continue processing to generate a transformed document, or the errors severity may abort the **XSLT** processor. Severe errors include, but are not limited to, unloadable components, inability to activate component instances and methods, or components indicating severe errors.

When the **XSLT** processor completes the processing of the style sheet,

the new document containing the results of the style...

...an External Component in a Style Sheet

Below is an example of a style sheet written in **XSL**.

```
<? xml version="1.0"?>
<- XSL Style sheet, DTD omitted ->
< xsl :stylesheet
xmlns: xsl ="http://www.w3.org/TR/VTD- xsl "
xmlns:xslcomponent--http://www.javasoft.com/lhs
>
< Xsl :template rmatch="paragraph">
<xslcomponent:component
name="summary"
class="com.sun.lhs.impl.samplecomponents.SummaryBuilder"
>
<xslcomponent:args>
<xslcomponent:methodname="genSummary"/>
<xslcomponent: argname="buffsize" value=" 100"/>
</xslcomponent:args>
<xslcomponent:component>
< xsl :apply-templates/>
</ xsl :template>
</ xsl :stylesheet>
```

The above example includes a Namespace declaration,  
xmlns:xslcomponent=http://www.javasoft.com/lhs,  
component tag...

...associated with the external component instance, and may contain arguments for the method which is executing. The **XSLT** processor then relinquishes control to the external component to execute the method defined in the style sheet...

Claim

... specific results.

4 The method of Claim 1, wherein the style sheet contains commands written in an **XSL** format.

5 The method of Claim 4, wherein the step of processing the method includes loading the external component in an **XSLT** processor and initiating the execution of the method associated with the external component.

6 The method of...

...the external component.

13 The method of Claim 8 wherein the external component is defined to an **XSLT** processor and the style sheet using a Namespace.

14 The method of Claim 8, wherein the step...

...the style sheet processor.

20 The system of Claim 17, wherein the style sheet processor is an **XSLT** processor and the style sheet contains tags written in an **XSL** format.

21 The system of Claim 17, wherein the style sheet processor is further operative to generate...

...associated with the external component.

Application Server

102

MEMORY

112

104 Secondary

Application Storage



110 Device 114  
XSLT Registry as  
Processor XML Document  
108  
Registry  
106  
Transformation 116  
Engine CPU  
120 118  
Video Display Input Device  
FIGn 1  
C...Fig. 4  
rt  
00  
Declare external component namespace  
in style sheet  
IF 05  
Define external component to XSLT  
processor  
IF 10  
Load external component in XSLT  
processor  
IF - 515  
Receive external component tag in style  
sheet  
IF 520  
Call the method associated with...

...where appropriate, c." the relevant passages Relevant to claim No.  
A WALSH, N. The Extensible Style Language: XSL , WEB 1-22  
Techniques, January 1999, vol.4, no.1, p 50, 52, 54  
A EXNER, N. Examining XML : new concepts and possibilities in Web 1-22  
authoring, Computers in Libraries, November 1998, v18, n10,  
pp 53.  
A STEVENS, M. Xtending the Enterprise, Intelligent Enterprise, 1-22  
November 1998, pp  
A STANEK, W. XML 201, PC Magazine, October 1998, 07, n17, 1-22  
pp. 217.  
A SENNA, J. XML bridges the gap, InfoWorld, June 1998, v20, n22, 1-22  
pp. 88. Further documents are listed in...

...of document, with indication, where appropriate, of the relevant  
passages Relevant to claim No.  
A ZEICHICK, A. XML and XSL , Network, November 1998, pp 1-22  
A MCGRATH, S. Rendering XML documents using XSL , Dr. Dobb's 1-22  
Journal, v23, n7, pp..86(6)  
A,P US 65031,989 A...

14/5,K/22 (Item 11 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00566635 \*\*Image available\*\*

**METHOD AND APPARATUS FOR LOCAL ADVERTISING**  
**TECHNIQUE DE PUBLICITE LOCALE ET DISPOSITIF A CET EFFET**  
Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,  
VENKATARAMAN Sriraman,  
BAEHR Geoffrey,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200030008 A1 20000525 (WO 0030008)  
Application: WO 99US27061 19991112 (PCT/WO US9927061)  
Priority Application: US 98192874 19981116

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD  
RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF  
CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 11877

#### English Abstract

Internet Service Providers (ISPs) or proxies (502) owned by ISP insert advertisements transmitted from a web host to a client. The advertisement may be stored in the proxy's cache or may be retrieved from a web server (510) for an advertiser. By providing the ISP with the ability to insert the advertisement, advertisements appear on small web sites that do not normally attract advertisers. Additionally, due to the number of advertisements placed by an ISP, small advertisers may have their advertisements appear in connection with frequently used web sites. One or more embodiments of the invention provide for an ISP to collect and store demographic information (508) such as the user's age, residence, credit history, etc.

#### French Abstract

La presente invention concerne une technique de publicite et un dispositif a cet effet. Les fournisseurs de services Internet (ISP) ou les mandataires (502) qu'ils detiennent, inserent de la publicite et la transmettent au client a partir d'un site d'hebergement. La publicite peut etre stockee dans un cache du mandataire ou recuperee d'un serveur reseau (510) pour un annonceur. En donnant aux ISP cette capacite d'insérer de la publicite, des encarts publicitaires apparaissent sur des petits sites qui d'habitude n'interessent pas les annonceurs. En outre, du fait du nombre d'encarts introduits par un ISP, ceux des petits annonceurs peuvent apparaitre en connexion avec des sites tres frequemment utilises. Au moins une realisation de cette invention permet a un ISP de recueillir et stocker des donnees demographiques (508) telles que l'age, l'adresse, les antecedents en matiere de credit de l'utilisateur, etc.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-017/60

International Patent Class: G06F-017/00

Fulltext Availability:

Detailed Description

Claims

#### Detailed Description

... computer software, and, more specifically, to advertising on the internet.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Cello.

Information servers maintain the information on the WWW and are capable of processing a client request. **Hypertext** Transport Protocol (HTTP) is the standard protocol for communication with an information server on the

WWW. HTTP...

...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future, speeding up access for commonly requested information. This maintaining of information and fetched **documents** by the proxy 102 is referred to as caching and the information maintained in the proxy 102...of the resource in the file structure of the server.

The WWW uses a concept known as **hypertext**. **Hypertext** provides the ability to create links within a **document** to move directly to other information.

To activate the link, it is only necessary to click on the **hypertext** link (e.g., a in the URL).

... If the client request is for a file, the HTTP...

...to the client using the HTTP.

A browser displays information to a client/user as pages or **documents** (referred to as "web pages" or "web sites"). A language is used to define the format for a page to be displayed in the WWW. The language is called **Hypertext Markup Language (HTML)**. A WWW page is transmitted to a client as an **HTML document**. The browser executing at the client parses the **document** and displays a page based on the information in the **HTML document**.

**HTML** is a structural language that is comprised of **HTML** elements that are nested within each other. An **HTML document** is a text file in which certain strings of characters, called tags, mark regions of the **document** and assign special meaning to them. These regions are called **HTML** elements. Each element has a name, or tag. An element can have attributes that specify properties of...

...properties

such as name, type, and value. The following provides an example of the structure of an **HTML document**.

```
< HTML >
<HEAD>
.... element(s) valid in the document head
</HEAD>
<BODY>
.... element(s) valid in the document body
</BODY>
</ HTML >
```

Each **HTML** element is delimited by the pair of characters "<" and ">". The name of the **HTML** element is contained within the delimiting characters. The combination of the name and delimiting characters is referred to as a...

...marker. The ending marker is identified by the inclusion of an another character, "/" that follows the "<" character.

**HTML** is a hierarchical language. With the exception of the **HTML** element, all other elements are contained within another element. The **HTML** element encompasses the entire **document**. It identifies the enclosed text as an

**HTML document**. The **HEAD** element is contained within the **HTML** element

and includes information about the **HTML document**. The **BODY** element is contained within the **HTML**. The **BODY** element contains all of the text and

other information to be displayed. Other **HTML** elements are described in **HTML** reference manuals.

#### Advertising

In traditional media (e.g., television, radio, and newspaper), local advertising is provided by...web page with an empty slot due to an **IMG** directive (a directive (as specified in the **HTML** of the web page) to load an inline image stored on the server). An advertisement slot is...web server 404. In one or more embodiments, the characteristics of the advertisement and advertisement slot are **encoded** as **part** of the URL itself or around the URL (but not **encoded** as **part** of the **LJRQ**). In another embodiment, the characteristics of the advertisement and advertisement slot are specified in tags of the **HTML** - In another embodiment, the characteristics of the advertisement and the advertisement slot may be shipped as part...s set price.

#### Advertisement Tags

To specify advertisement characteristics, advertisement tag(s) may be specified in the **HTML**. The server could specify a tag or tag combination (e.g., a **<A>** ... **</A>** block that follows...with a value of 34.

Alternatively, instead of specifying the above information in the form of an **HTML** tag, the information may be specified as part of the URL request that is provided to the...

...part of the data stream. For example, the server may specify that the advertisement slot in the **HTML** is transmitted as characters or bytes 55 to 75 of the data stream.

#### Auditing and Cross Verification...

#### Claim

... said second advertisement.

7 The method of claim 2 wherein said advertisement slot is identified by an **HTML** tag.

. The method of claim 2 further comprising:  
said proxy obtaining profile information relating to a client...

...for inserting said advertisement.

. The method of claim 28 wherein said available space is identified by an **HTML** tag.

34 The method of claim 28 further comprising said proxy obtaining profile information relating to a...

14/5,K/23 (Item 12 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00566629 \*\*Image available\*\*

**METHOD AND APPARATUS FOR NEGOTIATING TERMS FOR LOCAL ADVERTISING  
PROCEDE ET DISPOSITIF DE NEGOCIATION DES TERMES D'UNE PUBLICITE LOCALE**  
Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,

BAEHR Geoffrey,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200030002 A1 20000525 (WO 0030002)

Application: WO 99US26697 19991112 (PCT/WO US9926697)

Priority Application: US 98192874 19981116; US 99343965 19990630

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ  
BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **G06F-017/60**

International Patent Class: **G06F-017/00**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14926

#### English Abstract

A method and apparatus for local advertising. Web hosts sell advertising space on their web site and distribute web pages including the advertisements to Internet users or clients. It is desirable for advertisements to target specific audiences and persons that may be interested in the specific good or service being advertised. One or more embodiments of the invention provide for advertisements that are transmitted (606) from a web host to a client. The inserted advertisement may be an advertisement that is stored in the proxy's cache (604) or may be retrieved from a web server for an advertiser. One or more embodiments of the invention provide for a module to be downloaded to the proxy that is responsible for negotiating and inserting the advertisement.

#### French Abstract

L'invention concerne un procede et un dispositif de publicite locale. Des hotes du Web vendent des espaces publicitaires sur leur site Web et distribuent des pages Web comprenant les publicites a des utilisateurs ou clients de l'Internet. Il est souhaitable que les publicites ciblent un public specifique qui puisse etre interesse par une marchandise ou un service en particulier, annonce par publicite. Dans un ou plusieurs modes de realisation de l'invention, de publicites sont transmises (606) a partir d'un hote du Web, a un client. La publicite inseree peut etre une publicite conservee dans l'antememoire du mandataire (604), ou elle peut etre extraite a partir d'un serveur du Web, pour un publicitaire. L'invention concerne egalement un module, destine a etre telecharge en direction du mandataire responsable de la negociation et de l'insertion de la publicite.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-017/60**

International Patent Class: **G06F-017/00**

Fulltext Availability:

Detailed Description

#### Detailed Description

... computer software, and, more specifically, to advertising on the internet.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Cello.

Information servers maintain the information on the VVWW and are capable of processing a client request. **Hypertext** Transport Protocol (HTTP) is the standard protocol for communication with an information server on the VVWW. HTTP...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future,

speeding up access  
for commonly requested information. This maintaining of information and  
fetched **documents** by the proxy 102 is referred to as caching and the  
information maintained in the proxy 102...

...of the resource in the file structure of the server.

The VVWW uses a concept known as **hypertext**. **Hypertext** provides the  
ability to create links within a **document** to move directly to other  
information.

To activate the link, it is only necessary to click on the **hypertext**  
link (e.g., a WO 00/30002 PCT/US99/26697  
7  
the link to identify the location...

...to the client using the HTTP.

A browser displays information to a client/user as pages or **documents**  
(referred to as "web pages" or "web sites"). A language is used to define  
the  
format for a page to be displayed in the WWW. The language is called  
**Hypertext Markup Language (HTML)**. A VAIWV page is transmitted to  
a client as an **HTML document**. The browser executing at the client  
parses the **document** and displays a page based on the information in the  
**HTML document**.

**HTML** is a structural language that is comprised of **HTML** elements that  
are nested within each other. An **HTML document** is a text file in  
which certain strings of characters, called tags, mark regions of the  
**document** and assign  
special meaning to them. These regions are called **HTML** elements. Each  
element has a name, or tag. An element can have attributes that specify  
properties of...

...properties  
such as name, type, and value. The following provides an example of the  
structure of an **HTML document**.

```
< HTML >  
<HEAD>  
.... element(s) valid in the document head  
</HEAD>  
<BODY>  
.... element(s) valid in the document body  
</BODY>  
</ HTML >
```

Each **HTML** element is delimited by the pair of characters "<" and ">".  
The name of the **HTML** element is contained within the delimiting  
characters. The combination of the name and delimiting characters is  
referred by the inclusion of an another character, "/" that follows the  
"<" character.

**HTML** is a hierarchical language. With the exception of the **HTML**  
element, all other elements are contained within another element. The  
**HTML** element encompasses the entire **document**. It identifies the  
enclosed text as an

**HTML document**. The HEAD element is contained within the **HTML**  
element  
and includes information about the **HTML document**. The BODY element is  
contained within the **HTML**. The BODY element contains all of the text  
and  
other information to be displayed. Other **HTML** elements are described in  
**HTML** reference manuals.

Advertising  
In traditional media (e.g., television, radio, and newspaper), local

advertising is provided by...web page with an empty slot due to an IMG directive (a directive (as specified in the **HTML** of the web page) to load an inline image stored on the server). An advertisement slot is...image set to a particular URL (e.g., [www.CREDITCARD.com/NEW-AD.GIF](http://www.CREDITCARD.com/NEW-AD.GIF)) and the HREF (**H**ypertext **R**EFerence) used to specify the name or URL of the file that is loaded when the user ...

...the request and replies with a web page fetched from the company placing the advertisement (e.g., **HTML** text from [www.CARMAN-UFACTURER.com/cardeals.html](http://www.CARMAN-UFACTURER.com/cardeals.html) ).

In one or more embodiments of the invention, web server 404 can create new, unique identifiers for...web server 404. In one or more embodiments, the characteristics of the advertisement and advertisement slot are **encoded** as **part** of the URL itself or around the URL (but not **encoded** as **part** of the URL). In another embodiment, the characteristics of the advertisement and advertisement slot are specified in tags of the **HTML**. In another embodiment, the characteristics of the advertisement and the advertisement slot may be shipped as part...as standalone Java applications, or as Java "applets" which are identified by an applet tag in an **HTML** document, and loaded by a browser application. The class files associated with an application or applet may be...400 are faster.

#### Advertisement TWs

To specify advertisement characteristics, advertisement tag(s) may be specified in the **HTML** - The server could specify a tag or tag combination (e.g., a **<A>** ... **</A>** block that follows...

...with a value of 34.

Alternatively, instead of specifying the above information in the form of an **HTML** tag, the information may be specified as part of the URL request that is provided to the...

...part of the data stream. For example, the server may specify that the advertisement slot in the **HTML** is transmitted as characters or bytes 55 to 75 of the data stream.

Auditing and Cross Verification...

14/5,K/24 (Item 13 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00549734 \*\*Image available\*\*

#### METHOD AND APPARATUS FOR ENCODING CONTENT CHARACTERISTICS

#### PROCEDE ET APPAREIL DE CODAGE DE CARACTERISTIQUES D'UN CONTENU

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

GUPTA Amit,  
POGER Elliot,  
SCHUBA Christoph,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200013107 A2 20000309 (WO 0013107)

Application: WO 99US18990 19990819 (PCT/WO US9918990)

Priority Application: US 98146381 19980901

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG  
Main International Patent Class: H04L-029/06  
International Patent Class: G06F-017/30  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 6173

#### English Abstract

A method and apparatus for encoding characteristics for the retrieval of information. Depending on the characteristics, some methods for retrieving information may be preferred. If information is too large to utilize UDP, then TCP may be preferred. In addition, if information is not cacheable, then it is preferable to retrieve the information directly from the server instead of searching the cache first. A URL (Uniform Resource Locator) is utilized on the internet to specify the application protocol (e.g., http), the domain name (e.g., www.sun.com), and file location (e.g., /users/hcn/index.html). The suffix of a file indicator is utilized to identify how to process the data or information subsequent to retrieval. One or more embodiments of the invention provide for encoding characteristics of data to be transferred that indicates or hints at an optimal method to retrieve the data. For example, the URL may specify that TCP is the preferred transfer protocol, thereby avoiding an attempted transfer using UDP. Additionally, the encoding may specify that the client should preferably retrieve the information directly from the server instead of searching the proxy cache. The characteristics or preferred retrieval method may be encoded in any portion of a URL. Additionally, one or more embodiments of the invention provide for backwards compatibility with existing internet browsers by encoding the characteristics in the file location portion of the URL instead of the application protocol identifier portion.

#### French Abstract

L'invention concerne un procede et un appareil de codage de caracteristiques pour la recherche d'informations. Selon les caracteristiques, on peut preferer certains procedes de recherche d'informations. Si le volume d'informations est trop important pour utiliser le protocole datagramme (UDP), on opte pour le protocole de commande de transmission (TCP). En outre, si les informations ne peuvent etre stockees dans une antememoire, il est recommande de les extraire directement du serveur plutot que d'explorer l'antememoire. Un localisateur de ressources universel (URL), utilise sur l'internet, permet de preciser le protocole d'application (par exemple http), le nom de domaine (par exemple www.sun.com) et la localisation de fichiers (par exemple /users/hcn/index.html). Le suffixe d'un indicatif de fichier sert a determiner le mode de traitement des donnees ou des informations une fois la recherche effectuer. Une ou plusieurs realisations selon l'invention reposent sur le codage des caracteristiques des donnees a transferer qui indiquent ou suggerent un procede optimal pour rechercher les donnees en question. Par exemple, l'URL peut specifier que le TCP est le protocole de transfert prefere, et permet ainsi d'eviter une tentative de transfert utilisant le protocole UDP. En outre, le codage peut preciser que le client devrait, de preference, extraire l'information directement du serveur ou lieu de l'antememoire mandataire. On peut coder les caracteristiques ou le procede de recherche prefere dans n'importe quelle partie d'un URL. De plus, une ou plusieurs realisations selon l'invention reposent sur une compatibilite retroactive avec des navigateurs internet existants par codage des caracteristiques de la partie localisation de fichiers de l'URL, au lieu de la partie de l'identificateur du protocole d'application.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: H04L-029/06  
International Patent Class: G06F-017/30  
Fulltext Availability:



## Detailed Description

### English Abstract

...http), the domain name (e.g., www.sun.com), and file location (e.g., /users/hcn/index. **html** ). The suffix of a file indicator is utilized to identify how to process the data or information...

### French Abstract

...de domaine (par exemple www.sun.com) et la localisation de fichiers (par exemple /users/hcn/index. **html** ). Le suffixe d'un indicatif de fichier sert a determiner le mode de traitement des donnees ou...

### Detailed Description

... of computer software, and, more specifically, to optimizing network traffic.

Portions of the disclosure of this patent **document** contain material that is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure as it appears in the Patent and Trademark Office file or records, but...

...Netscape Navigator and Internet Explorer.

A browser displays information to a client or user as pages or **documents** . A language called **Hypertext Markup Language ( HTML )** is used to define the format for a page to be displayed in the browser. A Web page is transmitted to a client as an **HTML document** . The browser executing at the client parses the **document** and produces and displays a Web Page based on the information in the **HTML document** . Consequently, the **HTML document** defines the Web Page that is rendered at runtime on the browser.

B. Network Communication/Data Transfer...UDP) is utilized to ensure that the Application Protocol commands are completely transmitted to the receiving end. **HyperText Transfer Protocol (HTTP)** is the standard application protocol for communication with an information server on the WWW...

...server that carries out requests transmitted to it (i.e., from client 100), keeping copies of fetched **documents** or information for some time so that they can be accessed more quickly in the future, speeding up access for commonly requested information. This maintaining of information and fetched **documents** by the proxy 102 is referred to as caching and the information maintained in the proxy 102...

...the file structure of the server. For example, the URL "http://www.sunlabs.com/research/hsn/index. **html** " specifies the application protocol ("http"), the server host name ("www.sunlabs.com"), and the filename to be retrieved ("/research/hsn/index. **html** "). If the client request is for a file, the HTTP server locates the file and sends it...

...via command-line arguments, standard input, or environment variables. The gateway program processes the data, generates an **HTML document** , and returns the **HTML document** as its response to the server using CGI (via standard input, for example). The server forwards the **HTML document** to the client using the HTTP.

Once files have been retrieved, the client may utilize or process the file.

For example, if a **HTML document** is retrieved, a client's web browser

may  
parse the **HTML document** and display the **document** . Depending on the  
type of file retrieved, the client may activate an application to process  
the file.

For example, if a word processing **document** is retrieved, the client may  
activate a word processor to process the **document** . Alternatively, if an  
image file is retrieved, an image viewer may be activated to process and  
display...

...period "." and several letters that are attached to the end of a file  
name. For example, an **HTML document** may end with the suffix ".htm" or ".html " (e.g., Index. **html**  
" or  
"home. **html** "), a word processing **document** filename may end with the  
suffix ".doc" (e.g., "report.doc" or "letter.doc"), a JPEG (joint...

...image filename may end with the suffix ".jpg" (e.g.,  
"image.jpg" or "picture.jpg"), and a postscript **document** ( **document**  
created in the postscript page description language) may end with the  
suffix ".ps" (e.g., "calendar.ps...

...http), the domain name (e.g.,  
www.sun.com), and file location (e.g., /users/hcn/index. **html** ). The  
suffix of a file indicator is utilized to identify how to process the  
data or information...server thereby influencing the transfer of  
information across a network. Further, the facts or hints may be **encoded**  
into any **part** of a URL.

Figure 5 demonstrates a method for the encoding and use of  
information in URLs...display in the web browser. Such information may be  
passed in the form of a parameter in

**HTML** . For example, the file suffix " **html ?u**" in the URL  
"http://www.sunlabs.com/research/hcn/index. **html ?u**" passes the parameter  
it " indicating a UDP transfer.

u  
By encoding the information in the file...to the methods of the prior art  
(i.e., by invoking an image viewer, word processor, or **HTML document**  
browser to process the retrieved information).

Thus, a method and apparatus for encoding content characteristics for  
the...

14/5,K/25 (Item 14 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00546708 \*\*Image available\*\*

**METHOD AND APPARATUS OF TRANSLATING AND EXECUTING NATIVE CODE IN A VIRTUAL  
MACHINE ENVIRONMENT**

**PROCEDE ET APPAREIL DE TRADUCTION ET D'EXECUTION D'UN CODE NATIF DANS UN  
ENVIRONNEMENT MACHINE VIRTUELLE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

UNGAR David,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200010081 A2 20000224 (WO 0010081)

Application: WO 99US18158 19990810 (PCT/WO US9918158)

Priority Application: US 98134073 19980813

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ

MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: G06F-009/45

International Patent Class: G06F-009/455

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 8983

#### English Abstract

A method and apparatus of translating and executing native code in a virtual machine environment. Debugging of a virtual machine implementation is made easier through binary translation of native code, which permits greater platform independence and greater control over thread management and scheduling, and provides for identification of memory access errors in the native code. When native code is to be executed within a virtual machine environment, the native code is translated into an intermediate form. This intermediate form is processed to determine where memory access and blocking system calls occur. Validity checks are inserted into memory accessed calls to determine whether the portion of memory to be accessed by each call is within a permitted range. Wild pointers and other sources of memory access errors associated with the native code may thus be identified. Blocking system calls are replaced with non-blocking variants, and "yield" operations may be inserted into system calls and loops. The revised native code incorporating memory access validity checks and non-blocking system calls is compiled or interpreted by the virtual machine to execute the routines defined by the native code. Because the revised native code does not block other threads, threads scheduling may be managed by the virtual machine rather than the underlying operating system, and cooperative scheduling may be performed.

#### French Abstract

Procédé et appareil de traduction et d'exécution d'un code natif dans un environnement machine virtuelle. Le débogage d'une mise en application machine virtuelle est facilité par la traduction binaire d'un code natif, ce qui permet une plus grande indépendance de la plate-forme et une meilleure commande de la gestion et de la programmation des files et permet également l'identification d'erreurs d'accès en mémoire dans le code natif. Lorsque le code natif doit être exécuté dans un environnement machine virtuelle, ledit code natif est traduit en une forme intermédiaire. La forme intermédiaire est traitée pour déterminer où l'accès en mémoire et les appels bloquant le système se produisent. Des contrôles de validité sont insérés dans les appels d'accès en mémoire pour déterminer si la partie de la mémoire faisant l'objet d'un accès par chaque appel se trouvent dans une gamme permise. Des pointeurs sauvages et d'autres sources d'erreurs d'accès en mémoire associées au code natif peuvent ainsi être identifiées. Les appels bloquants le système sont remplacés par des variantes non bloquantes et des opérations de "fourniture" peuvent être insérées dans les appels et les boucles système. Le code natif révisé contenant des contrôles de validité d'accès en mémoire et des appels système non bloquants est compilé ou interprété par la machine virtuelle pour exécuter les sous-programmes définis par le code natif. Étant donné que le code natif révisé ne bloque pas d'autres files, la programmation de files peut être gérée par la machine virtuelle au lieu du système d'exploitation sous-jacent, et une programmation coopérative peut être exécutée.

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC ...

Main International Patent Class: G06F-009/45

International Patent Class: G06F-009/455

Fulltext Availability:

Detailed Description

Detailed Description

... as standalone Java applications, or as

Java "applets" which are identified by an applet tag in an HTML (

hypertext markup language ) document , and loaded by a browser application. The class files associated with an application or applet may be...

...server on a network,  
a web server application is executed on the server to respond to HTTP ( hypertext transport protocol) requests containing URLs (universal resource locators) to HTML documents , also referred to as "web pages." When a browser application executing on a client platform receives an HTML document (e.g., as a result of requesting an HTML document by forwarding a URL to the web server), the browser application parses the HTML and automatically initiates the download of the specified bytecode class files when it encounters an applet tag in the HTML document .

The classes of a Java applet are loaded on demand from the network (stored on a server...to provide enhanced debugging capabilities over prior art native method execution processes. The processing of the native code includes, as part of a binary translation procedure, the insertion of checks for memory access bugs, such as might be...

14/5,K/26 (Item 15 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00386801 \*\*Image available\*\*

**PROCESSOR WITH ACCELERATED ARRAY ACCESS BOUNDS CHECKING**

**PROCESSEUR A VERIFICATION ACCELEREE DES LIMITES D'ACCES AUX MATRICES**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

JOY William N,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727544 A1 19970731

Application: WO 97US1305 19970123 (PCT/WO US9701305)

Priority Application: US 9610527 19960124; US 96642248 19960502

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: **G06F-012/14**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 39617

English Abstract

An array boundary checking apparatus is configured to verify that a referenced element of an information array is within a maximum array size boundary value and a minimum array size boundary value. The array boundary checking apparatus of the invention includes an associative memory element that stores and retrieves a plurality of array bound values. Each one of the plurality of array bound values is associated with one of the plurality of array access instructions. An input section simultaneously compares the array access instruction identifier with at least a portion of each of the stored array reference entries, wherein the array access instruction identifier identifies an array access instruction. An output section is configured to provide as an array bounds output values one of the plurality of array bound values stored in one of the plurality of memory locations of the associated memory element. A first comparison element compares the value of the referenced element and the maximum array index boundary value and provides a maximum violation signal if the value of the element is greater than the maximum

array size boundary value. A second comparison element compares the value of the element and the minimum array size boundary value and provides a minimum violation signal if the value of the element is less than the minimum array bounds value. Either a maximum violation signal or a minimum violation signal results in an exception.

#### French Abstract

La presente invention concerne un dispositif de verification des limites de matrice qui est configure de facon a verifier qu'un element designe dans une matrice d'information se trouve compris entre une valeur limite maximale de taille de matrice et une valeur limite minimale de taille de matrice. Le dispositif de verification des limites de matrice de l'invention comporte un element de memoire associative stockant et restituant une pluralite de valeurs limites de matrices. Chacune des differentes valeurs limites de matrices est associee a l'une des differentes instructions d'accès a la matrice. Un module d'entree compare simultanement l'identificateur d'instruction d'accès a la matrice et au moins une partie de chacune des rubriques de designation de matrice stockees, l'identificateur d'instruction d'accès designant une instruction d'accès de matrice. Un module de sortie est configure pour fournir, sous forme de valeurs de sortie de limites d'une matrice, l'une des differentes valeurs de limites de matrice stockees dans l'un des differents emplacements memoire de l'element de memoire associe. Un premier comparateur, qui effectue une comparaison entre la valeur de l'element designe et la valeur limite maximum de l'indice de matrice, delivre un signal de violation de maximum si la valeur de l'element est superieure a la valeur limite maximale de taille de matrice. Un second comparateur, qui fait une comparaison entre la valeur de l'element et la valeur limite minimale de la taille de matrice, delivre un signal de violation de minimum si la valeur de l'element est inferieure a la valeur limite minimale de la matrice. Tout signal de violation de maximum et de violation de minimum genere une condition d'exception.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-012/14**

Fulltext Availability:

Detailed Description

#### Detailed Description

... ACCELERATED ARRAY ACCESS BOUNDS CHECKING

REFERENCE TO Appendix I

A portion of the disclosure of this patent

**document** including Appendix I. The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The

copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...being used for

external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP (**Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1,8 The JAVA...words of arguments in a method call is limited to 255.

## 2, Class File Format

This chapter **documents** the JAVA class (.class) file format.

Each class file contains the compiled version of either a JAVA...Machine Instruction Set

### 3.1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name

Short description of the instruction

Syntax.

opcode=number...

14/5,K/27 (Item 16 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00386796 \*\*Image available\*\*

## **METHODS AND APPARATUSES FOR STACK CACHING**

## **PROCEDES ET DISPOSITIFS DE GESTION DE PILE EN ANTEMEMOIRE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727539 A1 19970731

Application: WO 97US1303 19970123 (PCT/WO US9701303)

Priority Application: US 9610527 19960124; US 96642253 19960502; US 96647103 19960507

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Main International Patent Class: **G06F-009/42**

International Patent Class: **G06F-12:08**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 42794

English Abstract

The present invention provides a stack management unit (150) including a stack cache (155) to accelerate data transfers between the stack-based computing system and the stack (400). In one embodiment, the stack management unit (150) includes a stack cache (155), a dribble manager unit (151), and a stack control unit (152). The dribble manager unit (151) includes a fill control unit (694) and a spill control unit (698). Since the vast majority of memory accesses to the stack (400) occur at or near the top of the stack (400), the dribble manager unit (151) maintains the top portion of the stack (400) in the stack cache (155). Specifically, when the stack-based computing system is pushing data onto the stack (400) and a spill condition occurs, the spill control unit (698) transfers data from the bottom of the stack cache (155) to the stack (400) so that the top portion of the stack (400) remains in the stack cache (155). When the stack-based computing system is popping data off of the stack (400) and a fill condition occurs, the fill control unit (694) transfers data from the stack (400) to the bottom of the stack cache (155) to maintain the top portion of the stack (400) in the stack cache (155). Typically, a fill condition occurs as the stack cache (155) becomes empty and a spill condition occurs as the stack cache (155) becomes full.

#### French Abstract

La presente invention concerne une unite de gestion de pile (150) comprenant une antememoire de pile (155) destinee a accelerer les echanges de donnees entre la pile (400) et le systeme informatique a gestion par pile. Selon une realisation, l' unite de gestion de pile (150) comporte une antememoire de pile (155), un regulateur de flux (151) et un module de gestion de pile (152). Le regulateur de flux (151) comporte une unite de regulation de remplissage (694) et une unite de regulation de debordement (698). Etant donne qu'une grande majorite des acces memoire a la pile (400) se fait au niveau de, ou a proximite du sommet de la pile (400), le regulateur de flux (151) maintient le haut de la pile (400) dans l'antememoire de pile (155). En particulier, lorsque le systeme informatique a gestion par pile introduit des donnees dans la pile (400) et qu'il se presente une condition de debordement, l' unite de regulation de debordement (698) transfere les donnees du bas de l'antememoire de pile (155) vers la pile (400) de facon que le haut de pile (400) reste dans l'antememoire de pile (155). Lorsque le systeme informatique a gestion par pile chasse des donnees en les faisant remonter dans la pile (400) et qu'il se presente une condition de remplissage, l' unite de regulation de remplissage (694) transfere des donnees de la pile (400) vers le bas de l'antememoire de pile (155) de facon a conserver la haut de la pile (400) dans l'antememoire de pile (155). En general, il se produit une condition de remplissage a chaque fois que l'antememoire de pile (155) se vide, et il se produit une condition de debordement a chaque fois que l'antememoire de pile (155) est saturee.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/42**

International Patent Class: **G06F-12:08**

Fulltext Availability:

Detailed Description

Detailed Description

... AND APPARATUSES FOR STACK CACHING

REFERENCE TO AyDendix I

A portion of the disclosure of this patent

**document** including Appendix I, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The

copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...being used for external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP ( **Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...Mountain View, California 94043-1100 U.S.A.

All rights reserved. This BETA quality release and related **documentation** are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this release or related **documentation** may be reproduced in any form by any means without prior written authorization of Sun and its...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

#### Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1.8 The JAVA...words of arguments in a method call is limited to 255.

#### 2, Class File Format

This chapter **documents** the JAVA class (.class) file format.

Each class file contains the compiled version of either a JAVA...Machine Instruction Set

##### 3,1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name  
Short description of the instruction  
Syntax.

opcode=number...



00386794      \*\*Image available\*\*

**A   PROCESSOR FOR EXECUTING INSTRUCTION SETS RECEIVED FROM A NETWORK OR FROM  
A LOCAL MEMORY**

**PROCESSEUR D'EXECUTION DE JEUX D'INSTRUCTIONS RECUS D'UN RESEAU OU D'UNE  
MEMOIRE LOCALE**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

TREMBLAY Marc,

O'CONNOR James Michael,

Patent and Priority Information (Country, Number, Date):

Patent:                   WO 9727537 A2 19970731

Application:            WO 97US1307 19970123 (PCT/WO US9701307)

Priority Application: US 9610527 19960124; US 96104 19960502

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: **G06F-009/318**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 38682

**English Abstract**

A dual instruction set processor can decode and execute both code received from a network and other code supplied from a local memory. Thus, the dual instruction set processor is capable of executing two different types of instructions, from two different sources, permitting the dual instruction set processor to have maximum efficiency. A computer system with the foregoing described dual instruction set processor, a local memory, and a communication interface device, such as a modem, for connection to a network, such as the Internet or an intranet, can be optimized to execute, for example, JAVA code from the network, and to execute non-JAVA code stored locally, or on the network but in a trusted environment or an authorized environment.

**French Abstract**

La presente invention concerne un processeur de double jeu d'instructions capable de decoder et d'exécuter non seulement un code recu d'un reseau, mais aussi un code different fourni par une memoire locale. Un tel processeur de double jeu d'instructions est capable d'exécuter deux types differents d'instructions en provenance de deux sources differentes, ce qui lui confere une efficacite maximale. Un systeme informatique comprenant ce type de processeur de double jeu d'instructions, une memoire locale, et un dispositif d'interface de communications, par exemple un modem, permettant un raccordement a un reseau de type Internet ou Intranet, est optimisable notamment pour l'exécution, par exemple, du code JAVA en provenance du reseau et pour l'exécution de code non JAVA stocke localement, ou sur le reseau, mais dans un environnement a deux niveaux de securite ou dans un environnement autorise.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/318**

Fulltext Availability:

Detailed Description

**Detailed Description**

... OR FROM A LOCAL MEMORY

REFERENCE TO Appendix I

A portion of the disclosure of this patent document including Appendix I, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark office patent files...

...being used for external transactions between the business and the outside world. For the purposes of this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an...of routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP (**Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...Mountain View, California 94043-1100 U.S.A.

All rights reserved. This BETA quality release and related **documentation** are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this release or related **documentation** may be reproduced in any form by any means without prior written authorization of Sun and its...THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

#### Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. We have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...

...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;  
Chapter 2 describes...process. It stores method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1,8 The JAVA...words of arguments in a method call is limited to 255.

#### 2e Class File Format

This chapter **documents** the JAVA class (.class) file format.

is Each class file contains the compiled version of either a...Instruction Set

#### 3.1 Po-rmat for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an

00386793    \*\*Image available\*\*

**INSTRUCTION FOLDING FOR A STACK-BASED MACHINE**  
**PLIAGE D'INSTRUCTIONS POUR MACHINE A EMPILEMENT**

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC**

Inventor(s):

O'CONNOR James Michael,

TREMBLAY Marc,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9727536 A1 19970731

Application: WO 97US1221 19970123 (PCT/WO US9701221)

Priority Application: US 9610527 19960124; US 96984 19960507

Designated States: CN JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE

Main International Patent Class: **G06F-009/318**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 46100

English Abstract

An instruction decoder (135, 1118) allows the folding away of JAVA virtual machine instructions pushing an operand onto the top of a stack (e.g., 423, 155, 812) merely as a precursor to a second JAVA virtual machine instruction which operates on the top of stack operand. Such an instruction decoder identifies foldable instruction sequences and supplies an execution unit with a single equivalent folded operation thereby reducing processing cycles otherwise required for execution of multiple operations corresponding to the multiple instructions of the folded instruction sequence. Instruction decoder embodiments described herein provide for folding of two, three, four, or more instruction folding. For example, in one instruction decoder embodiment described herein, two load instructions and a store instruction can be folded into execution of operation corresponding to an instruction appearing therebetween in the instruction sequence.

French Abstract

Decodeur d'instructions (135, 1118) permettant de plier des instructions machine virtuelles JAVA en poussant un operande sur le sommet d'une pile (par exemple 423, 155, 812), pour servir simplement de precurseur a une deuxieme instruction machine virtuelle JAVA qui fonctionne au sommet de l'operande de la pile. Ce decodeur d'instructions identifie des sequences d'instructions pliables et fournit une unite d'execution avec une seule operation pliee equivalente, ce qui reduit les cycles de traitement requis par ailleurs pour l'execution d'operations multiples correspondant aux instructions multiples de la sequence d'instructions pliees. Les modes de realisation de decodeurs d'instructions decrits ici prevoient le pliage de deux, trois, quatre instructions ou plus. Ainsi, dans l'un des modes de realisation de decodeur d'instructions decrits ici, deux instructions de charge et une instruction de stockage peuvent etre pliees pour l'execution des operations correspondant a une instruction apparaissant entre elles dans la sequence d'instructions.

Patent Applicant/Assignee:

**SUN MICROSYSTEMS INC ...**

Main International Patent Class: **G06F-009/318**

Fulltext Availability:

Detailed Description

Detailed Description

... FOR A STACK-BASED MACHINE

REFERENCE TO APPENDIX I

A portion of the disclosure of this patent document including Appendix 1, The JAVA Virtual Machine Specification and Appendix A thereto, contains material which is subject...

...copyright protection,

The copyright owner has no objection to the facsimile reproduction by anyone of the patent **document** or the patent disclosure, as it appears in the U.S. Patent and Trademark Office patent files...

...transactions between the business and the outside world. For the purposes of  
SUBSTMITE SHEET (RULE 26)  
this **document**, the term "networks" includes both the Internet and intranets. However, the distinction between the Internet and an... routines for coping easily with TCP/IP protocol (Transmission Control Protocol based on Internet protocol), HTTP ( **Hypertext** Transfer Protocol) and FTP (File Transfer Protocol). The JAVA programming language is intended to be used in...THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME.

SUBSTMITE SHEET (RULE 26)

- 48

Preface

This **document** describes version 1.0 of the JAVA Virtual Machine and its instruction set. we have written this **document** to act as a specification for both compiler writers, who wish to target the machine, and as...to machine code, although Sun has not released such implementations at this time.

The rest of this **document** is structured as follows.

Chapter 1 describes the architecture of the JAVA Virtual Machine;

Chapter 2 describes...26)

- 54

method code (compiled JAVA code) and symbol tables. In the current JAVA implementation, method **code** is not **part** of the garbage-collected heap, although this is planned for a future release.

1.8 The JAVA...

...words of arguments in a method call is limited to 255.

2. Class File Format

This chapter **documents** the JAVA class (.class) file format.

SUBSTMUTE SHEET (RULE 26)

.55

Each class file contains the compiled...Machine Instruction Set

3.1 Format for the Instructions

JAVA Virtual Machine instructions are represented in this **document** by an entry of the following form.

instruction name

Short description of the instruction

Syntax.

opcode=number...

14/5,K/33 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013674794 \*\*Image available\*\*

WPI Acc No: 2001-159006/200116

XRPX Acc No: N01-115902

**Extensible style language transformation in Internet, by determining proper XSL transformation based on client type and configuration, to enable application to access registry on proper transformation confirmation**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM  
Inventor: KUZNETSOV P; YALCINALP L U  
Number of Countries: 093 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200073941	A2	20001207	WO 2000US14602	A	20000530	200116 B
AU 200055899	A	20001218	AU 200055899	A	20000530	200118
EP 1236129	A2	20020904	EP 2000941150	A	20000530	200266
			WO 2000US14602	A	20000530	
JP 2003524821	W	20030819	WO 2000US14602	A	20000530	200356
			JP 2001500988	A	20000530	

Priority Applications (No Type Date): US 99136764 P 19990528

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200073941	A2	E	74 G06F-017/30	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW				
AU 200055899	A			Based on patent WO 200073941
EP 1236129	A2	E	G06F-017/30	Based on patent WO 200073941
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
JP 2003524821	W		88 G06F-017/21	Based on patent WO 200073941

Abstract (Basic): WO 200073941 A2

NOVELTY - The set of interfaces are provided to create application object in registry and permitting developers to publish **XML** document in registry. A registry origin determines proper extensible style language ( **XSL** ) transformation based on type of the client and configuration. The transformed **XML** document is sent to the client, when proper transformation is confirmed.

DETAILED DESCRIPTION - The transformation engine maintains information of relationship between each of the **XSL** stylesheets and any other element such as application, client and configuration. INDEPENDENT CLAIMS are also included for the following:

- (a) **XSL** document transformation system;
  - (b) program for **XSL** transformation method
- USE - In Internet.

ADVANTAGE - The transformation registry service allows different clients corresponding to applications to be configured, so that application can specify new clients overtime. Therefore, applications can dynamically evolved to support new and/or different client, configurations or transformations.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart for transformation registry service.

pp; 74 DwgNo 6/6

Title Terms: EXTEND; STYLE; LANGUAGE; TRANSFORM; DETERMINE; PROPER;  
TRANSFORM; BASED; CLIENT; TYPE; CONFIGURATION; ENABLE; APPLY; ACCESS;  
REGISTER; PROPER; TRANSFORM; CONFIRM

Derwent Class: T01

International Patent Class (Main): G06F-017/21 ; G06F-017/30

International Patent Class (Additional): G06F-012/00

File Segment: EPI

**Extensible style language transformation in Internet, by determining proper XSL transformation based on client type and configuration, to enable application to access registry on proper transformation confirmation**

Patent Assignee: SUN MICROSYSTEMS INC ...

Abstract (Basic):

... The set of interfaces are provided to create application object in registry and permitting developers to publish **XML** document in registry. A registry origin determines proper extensible style language

( XSL ) transformation based on type of the client and configuration.  
The transformed XML document is sent to the client, when proper  
transformation is confirmed.

... The transformation engine maintains information of relationship  
between each of the XSL stylesheets and any other element such as  
application, client and configuration. INDEPENDENT CLAIMS are also  
included for...

...a) XSL document transformation system...

...b) program for XSL transformation method...

International Patent Class (Main): G06F-017/21 ...

... G06F-017/30

International Patent Class (Additional): G06F-012/00

14/5,K/34 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013576185 \*\*Image available\*\*  
WPI Acc No: 2001-060392/200107  
XRPX Acc No: N01-045190

Document generation method using extensible style language style sheet in  
data processing system, by processing tags showing external component in  
style sheet related to input document

Patent Assignee: SUN MICROSYSTEMS INC (SUNM

Inventor: YALCINALP L U

Number of Countries: 021 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200054174	A1	20000914	WO 2000US6379	A	20000313	200107 B
EP 1218830	A1	20020703	EP 2000916254	A	20000313	200251
			WO 2000US6379	A	20000313	
US 6507857	B1	20030114	US 99123916	P	19990312	200313
			US 2000523378	A	20000310	
JP 2003521755	W	20030715	JP 2000604330	A	20000313	200347
			WO 2000US6379	A	20000313	

Priority Applications (No Type Date): US 2000523378 A 20000310; US 99123916  
P 19990312

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200054174	A1	E	29	G06F-017/21	
--------------	----	---	----	-------------	--

Designated States (National): JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE

EP 1218830	A1	E		G06F-017/21	Based on patent WO 200054174
------------	----	---	--	-------------	------------------------------

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI  
LU MC NL PT SE

US 6507857	B1			G06F-017/21	Provisional application US 99123916
------------	----	--	--	-------------	-------------------------------------

JP 2003521755	W		33	G06F-017/21	Based on patent WO 200054174
---------------	---	--	----	-------------	------------------------------

Abstract (Basic): WO 200054174 A1

NOVELTY - The style sheet containing tags and commands written in  
extensible style language ( XSL ) associated with input document is  
retrieved. The tags which represent the external component, are  
processed to generate a transform document. The external components are  
processed to obtain application specific results which are then  
included in the transform document.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the  
following:

- (a) executing method of external components in the style sheet;
- (b) system for processing external components in the style sheet;
- (c) document generation program

USE - For generating transform document using extensible style

language ( XSL ) style sheet in data processing system.

ADVANTAGE - Enables using application program interface (API) which provides efficient access to the registers, without need for additional software or interface with the files.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the method for creating and processing external components in style sheet.

pp; 29 DwgNo 5/5

Title Terms: DOCUMENT; GENERATE; METHOD; EXTEND; STYLE; LANGUAGE; STYLE; SHEET; DATA; PROCESS; SYSTEM; PROCESS; TAG; EXTERNAL; COMPONENT; STYLE; SHEET; RELATED; INPUT; DOCUMENT

Derwent Class: T01

International Patent Class (Main): G06F-017/21

International Patent Class (Additional): G06F-017/22 ; G06F-017/30

File Segment: EPI

Patent Assignee: SUN MICROSYSTEMS INC ...

Abstract (Basic):

... The style sheet containing tags and commands written in extensible style language ( XSL ) associated with input document is retrieved. The tags which represent the external component, are processed to generate...

... For generating transform document using extensible style language ( XSL ) style sheet in data processing system...

International Patent Class (Main): G06F-017/21

International Patent Class (Additional): G06F-017/22 ...

... G06F-017/30

Set	Items	Description
S1	2640	XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY
S2	21976	EXTENSIBLE() (MARKUP OR MARK() UP) () LANGUAGE? OR XML OR HYPE- RTEXT OR HYPERMEDIA OR (MARKUP OR MARK() UP) () LANGUAGE? OR HTML OR VCML
S3	451809	STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?
S4	8246	(PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY- PHER? OR ENCIPHER? OR ENCYPHER? OR CRYPT? OR CODE? ? OR CODED)
S5	6560	SUN() MICROSYSTEMS
S6	23576	S1 OR S2
S7	7690	S6 (S) S3
S8	878	S1 (S) S3
S9	760	S1 (10N) S3
S10	720	S1 (5N) S3
S11	91	S6 (S) S4
S12	1	S11 (S) S5
S13	16	S6 (5N) S4
S14	17	S12 OR S13

File 348:EUROPEAN PATENTS 1978-2003/Nov W05

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031203,UT=20031127

(c) 2003 WIPO/Univentio



14/5,K/7 (Item 7 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01264392

Method and apparatus for electronic document management  
Verfahren und Gerat fur elektronische Dokumentverwaltung  
Procede et dispositif pour la gestion electronique de documents  
PATENT ASSIGNEE:

Ricoh Company, Ltd., (209037), 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo  
143-8555, (JP), (Applicant designated States: all)

INVENTOR:

Piersol, Kurt, 2882 Sand Hill Road, Suite 115, Menlo Park, CA 94025-7022,  
(US)

LEGAL REPRESENTATIVE:

Schwabe - Sandmair - Marx (100951), Stuntzstrasse 16, 81677 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 1091304 A2 010411 (Basic)

EP 1091304 A3 021002

APPLICATION (CC, No, Date): EP 2000117278 000816;

PRIORITY (CC, No, Date): US 410364 990930

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 1091304 A2

A method and apparatus for managing electronic documents within a network. A series of processes perform electronic document capture, indexing, and searching functions within a networked environment. A graphical web-based user interface is provided to facilitate user interaction with the apparatus.

ABSTRACT WORD COUNT: 42

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 010411 A2 Published application without search report

Examination: 010411 A2 Date of request for examination: 20000816

Search Report: 021002 A3 Separate publication of the search report

Examination: 030115 A2 Date of dispatch of the first examination  
report: 20021202

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200115	829
SPEC A	(English)	200115	7704
Total word count - document A			8533
Total word count - document B			0
Total word count - documents A + B			8533

...SPECIFICATION along with their acceptable value types.

Figure 6 illustrates one embodiment of an FMA metadata file in **extensible markup language (XML)**. The **partial metadata code** depicted in Figure 6 is illustrative of what might be produced for a document that was captured...

14/5,K/17 (Item 10 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00749091

\*\*Image available\*\*

METHOD OF AND APPARATUS FOR PROVIDING SECURE COMMUNICATION OF DIGITAL DATA  
BETWEEN DEVICES

SECURISATION DES ECHANGES DE DONNEES NUMERIQUES ENTRE DISPOSITIFS ET  
APPAREIL A CET EFFET

Patent Applicant/Assignee:

CANAL+ SOCIETE ANONYME, 85/89, quai Andre Citroen, F-75711 Paris Cedex 15  
, FR, FR (Residence), FR (Nationality), (For all designated states

except: US)

Patent Applicant/Inventor:

MAILLARD Michel, 42, avenue du Marechal Leclerc, F-28130 Maintenon, FR,  
FR (Residence), FR (Nationality), (Designated only for: US)  
DAUVOIS Jean-Luc, 19, rue Eugene Manuel, F-75116 Paris, FR, FR  
(Residence), FR (Nationality), (Designated only for: US)  
DUBLANCHET Frederic, Canal+ Technologies Societe Anonyme, 34, place Raoul  
Dautry, F-75516 Paris Cedex 15, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)  
LEPORINI David, Canal+ Technologies Societe Anonyme, 34, place Raoul  
Dautry, F-75516 Paris Cedex 15, FR, FR (Residence), FR (Nationality),  
(Designated only for: US)

Legal Representative:

COZENS Paul Dennis, Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL  
, GB

Patent and Priority Information (Country, Number, Date):

Patent: WO 200062540 A1 20001019 (WO 0062540)  
Application: WO 2000IB432 20000331 (PCT/WO IB0000432)  
Priority Application: EP 99400901 19990413

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE  
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: H04N-005/913

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 12524

English Abstract

The present invention provides a method of providing secure communication of digital data between devices, said method comprising the steps of communicating from one device an identifier of a device to an independent security module and performing device validation depending on the identity of the received identifier.

French Abstract

La presente invention concerne un procede permettant de securiser les echanges de donnees numeriques entre des dispositifs. En l'occurrence, ce procede consiste a envoyer a un module de securite independant un identificateur a partir d'un dispositif, puis a effectuer la validation du dispositif en tenant compte de l'identite de l'identificateur reçu.

Legal Status (Type, Date, Text)

Publication 20001019 A1 With international search report.

Examination 20001228 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:

Detailed Description

Detailed Description

... CSS keys, from the ECM.

In step 516, the CSS keys are passed to the standardized security part 66 which **encrypts** the CSS keys using the session key SK and passes the encrypted CSS keys to the digital TV 14...

Set	Items	Description
S1	2012	XSL OR EXTENSIBLE() (STYLESHEET OR STYLE() SHEET) () LANGUAGE - OR CSS OR CASCADING () STYLE() SHEET? OR CSS2 OR XSLT OR XQUERY
S2	7451	EXTENSIBLE() (MARKUP OR MARK() UP) () LANGUAGE? OR XML OR HYPE- RTEXT OR HYPERMEDIA OR (MARKUP OR MARK() UP) () LANGUAGE? OR HTML OR VCML
S3	135140	STYLESHEET? OR STYLE() SHEET? OR TEMPLAT? OR DOCUMENT?
S4	11073	(PARTIAL OR PART) (2N) (ENCRYPT? OR ENCODE? OR CIPHER? OR CY- PHER? OR ENCIPHER? OR ENCYIPHER? OR CRYPT? OR CODE? ? OR CODED)
S5	13	SUN() MICROSYSTEMS
S6	9362	S1 OR S2
S7	9	S6 AND S3 AND S4
S8	0	S5 AND S6
S9	22	S5 OR S7

File 347: JAPIO Oct 1976-2003/Aug (Updated 031202)  
(c) 2003 JPO & JAPIO

File 350: Derwent WPIX 1963-2003/UD, UM & UP=200379  
(c) 2003 Thomson Derwent

9/5/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06858576 \*\*Image available\*\*  
METHOD AND DEVICE FOR DATA DISTRIBUTION AND METHOD AND DEVICE FOR DATA  
RECEPTION

PUB. NO.: 2001-086078 [JP 2001086078 A]  
PUBLISHED: March 30, 2001 (20010330)  
INVENTOR(s): USUDA YUTAKA  
APPLICANT(s): SONY CORP  
APPL. NO.: 11-263761 [JP 99263761]  
FILED: September 17, 1999 (19990917)  
INTL CLASS: H04H-001/00; G06F-013/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To attain excellent distribution of data by incorporating a plurality of pieces of supplied information in response to output attributes into the single distribution data contents and also incorporating the contents identification information showing data contents attributes that is described in a computer language and to be distributed into the distribution data contents.

SOLUTION: A production part 100 produces **style sheets** which prescribe an **XML** instance and its expression format and also source elements that configure the data modules of various types of monomedia of broadcast programs. These source elements are sent to a sending part 200 via a LAN. The part 200 sends the sending data of a contents transmission system 201, a base band control system 202, an AV encoder 203 and a caption inserter 204 to a transmission part 300. The **part 300 encodes** the **XML** instance by using a multimedia encoding part 301 and sends the encoded **XML** instance to a contents transmission part 302. The data transmission contents are equal to an instance, that is described in an **XML** language format and a CPU executes an **XML** engine with respect to an **XML** .

COPYRIGHT: (C)2001,JPO

9/5/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06815674 \*\*Image available\*\*  
I-CODE AND URL CONVERTING MEANS

PUB. NO.: 2001-043167 [JP 2001043167 A]  
PUBLISHED: February 16, 2001 (20010216)  
INVENTOR(s): SUYAMA SEIICHI  
APPLICANT(s): SUYAMA SEIICHI  
APPL. NO.: 11-215969 [JP 99215969]  
FILED: July 29, 1999 (19990729)  
INTL CLASS: G06F-013/00; G06F-015/00; G06F-017/30

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a converting means used by a system which uses a simplified symbol instead of a URL when a client accesses homepages of a company.

SOLUTION: This means converts an i-code composed of a simplified character string into a URL and comprises a client terminal machine 10 equipped with an i- **code** input **part 11**, a conversion instruction generation part 12, and a homepage display part 13 and an i-code/URL conversion server 3 equipped with a Web sever 31, an i- **code** /URL conversion **part 32**, an i-code/URL database 33, and an **HTML document** generation part 34. The client terminal machine 10 and conversion server are used over a public communication line. The i-code has the short character string, so it is easy to remember and can securely and easily be inputted with less

mistakes, thereby saving a communication time. Therefore, homepages of the company can be accessed naturally.

COPYRIGHT: (C)2001,JPO

9/5/4 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06707695 \*\*Image available\*\*  
SYSTEM AND METHOD FOR REGISTERING DATA IN HTML DOCUMENT RETRIEVAL  
SYSTEM AND RECORDING MEDIUM

PUB. NO.: 2000-293527 [JP 2000293527 A]  
PUBLISHED: October 20, 2000 (20001020)  
INVENTOR(s): ISHII HIDEKI  
APPLICANT(s): NEC SOFTWARE CHUGOKU LTD  
APPL. NO.: 11-095403 [JP 9995403]  
FILED: April 01, 1999 (19990401)  
INTL CLASS: G06F-017/30; G06F-012/00

#### ABSTRACT

PROBLEM TO BE SOLVED: To realize efficient data registration in a document retrieval system and to improve the efficiency of retrieval.

SOLUTION: A web robot 20 is stored in an HTML document data 21. A code conversion processing part 11 in a data registration system 10 converts a Japanese character code and a keyword extraction part 12 extracts all nouns as keywords by analyzing the morpheme of an HTML document. A data comparing part 13 compares each keyword included in stored keywords 14 stored in the past with each keyword extracted by the extraction part 12. A registering URL determination part 15 determines a URL and a title to be registered in a document retrieval system 30 and a data registration part 16 registers the URL, the title and keywords extracted by the extraction part 12 in the system 30 and registers these data also in the stored keywords 14 as storing information.

COPYRIGHT: (C)2000,JPO

9/5/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06154623 \*\*Image available\*\*  
DOCUMENT INFORMATION MANAGEMENT SYSTEM

PUB. NO.: 11-096166 [JP 11096166 A]  
PUBLISHED: April 09, 1999 (19990409)  
INVENTOR(s): YANO TAKASHI  
TABATA YASUHIRO  
ISHIJIMA TAKASHI  
APPLICANT(s): RICOH CO LTD  
APPL. NO.: 10-052522 [JP 9852522]  
FILED: March 04, 1998 (19980304)  
PRIORITY: 09215869 [JP 979215869], JP (Japan), July 25, 1997 (19970725)  
INTL CLASS: G06F-017/30

#### ABSTRACT

PROBLEM TO BE SOLVED: To enable direct access from a paper document, which has not been made a hypertext, to the digital world and to improve the usability by selecting a desired word from the paper document and giving a selection mark, and reading it in a system and retrieving the document by using the word as a key word.

SOLUTION: A data base means 101 stores document files in advance. A medium form 102 has a document information part where document information is recorded and a bar code information part where

electronic information corresponding to the **document** information is converted into bar code information and recorded. A marking means 103 selects a desired word from the **document** information and gives a selection mark. A read means 104 reads the selection mark and bar code information out of the medium form 102 having been given the selection mark. A retrieval means 104 retrieves a corresponding **document** file from the data base means 101 by using the word given the selection mark as a key word.

COPYRIGHT: (C)1999,JPO

9/5/16 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014433532 \*\*Image available\*\*  
WPI Acc No: 2002-254235/200230  
Related WPI Acc No: 2001-396864  
XRPX Acc No: N02-196335

**Computer program code parallelization for scientific-engineering applications, involves generating global-to-local index variable mapping and synchronization points based on numerical-method class and index variable**

Patent Assignee: UNIV IOWA STATE RES FOUND INC (IOWA )

Inventor: KIM Y; KOTHARI S C; SIMANTA M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6339840	B1	20020115	US 97867079	A	19970602	200230 B

Priority Applications (No Type Date): US 97867079 A 19970602

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6339840	B1	24	G06F-015/16		

Abstract (Basic): US 6339840 B1

NOVELTY - A numerical-method class and index variables in the input code are identified. Synchronization points and a global-to-local index variable mapping are generated, based on the numerical-method class and index variables.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Computer program code parallelizing system;
- (b) Storage medium storing computer program code parallelizing program

USE - For parallelizing of large codes used in scientific and engineering applications including finite difference codes, finite element code, boundary element code using suitable scientific-workstation-class computer such as marketed by **SUN MICROSYSTEMS**, digital equipment corporation, or silicon graphics, incorporated SGI using UNIX or LINUX operating system. Especially for parallelizing the codes of Penn State/National center for atmospheric research (NCAR) MM5 program, which is a fifth generation mesoscale meteorology model.

ADVANTAGE - Facilitates automatic detection of data communication between processors and minimizes number of synchronization points, thus minimizing interprocessor communication overhead.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining computer program code parallelization method.

pp; 24 DwgNo 5/8

Title Terms: COMPUTER; PROGRAM; CODE; SCIENCE; ENGINEERING; APPLY; GENERATE  
; GLOBE; LOCAL; INDEX; VARIABLE; MAP; SYNCHRONISATION; POINT; BASED;  
NUMERIC; METHOD; CLASS; INDEX; VARIABLE

Derwent Class: T01

International Patent Class (Main): G06F-015/16

File Segment: EPI

9/5/17 (Item 12 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014376566 \*\*Image available\*\*  
WPI Acc No: 2002-197269/200226  
XRPX Acc No: N02-149838

**Resource management method for mobile program code wherein a Resource Requirements List is transmitted as part of the authentication certification**

Patent Assignee: UNIV CATHOLIQUE LOUVAIN (UYLO-N); MAS RIBES J (RIBE-I)  
Inventor: MAS RIBES J

Number of Countries: 095 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1132796	A1	20010912	EP 2000104966	A	20000308	200226 B
AU 200144194	A	20010917	AU 200144194	A	20010306	200226
WO 200167212	A1	20010913	WO 2001EP2505	A	20010306	200226
EP 1290523	A1	20030312	EP 2001917069	A	20010306	200320
			WO 2001EP2505	A	20010306	
US 20030079123	A1	20030424	WO 2001EP2505	A	20010306	200330
			US 2002221418	A	20020909	

Priority Applications (No Type Date): EP 2000104966 A 20000308

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1132796	A1	E	16	G06F-001/00	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
AU 200144194	A			G06F-001/00	Based on patent WO 200167212
WO 200167212	A1	E		G06F-001/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
EP 1290523	A1	E		G06F-001/00	Based on patent WO 200167212
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 20030079123	A1			H04L-009/00	

Abstract (Basic): EP 1132796 A1

NOVELTY - The mobile program code has an encrypted authentication certificate supplied by the code distributor at the negotiation phase of the code download. Within this certificate, a Resource Requirements List (RRL) is included, detailing all of the system resources required by the program code. The RRL may include named resources such as files or directories, types of resources or even specific hardware models.

DETAILED DESCRIPTION - Additional resource properties such as available commands, quantities such as memory or disk space availability and maximum usage specifications such as network throughput rates can also included.

An INDEPENDENT CLAIM is also included for the mobile program code using the management method.

USE - To manage resource access and requirements of mobile multi-platform program code e.g. Sun Microsystems Java programming language.

ADVANTAGE - This method allows computer programs to be downloaded and installed whilst controlling access to system resources. It also allows the software supplier to ensure the user has the required system resources available before installation.

DESCRIPTION OF DRAWING(S) - The drawing shows block diagram of the RRL bundling process.

pp; 16 DwgNo 1/6

Title Terms: RESOURCE; MANAGEMENT; METHOD; MOBILE; PROGRAM; CODE; RESOURCE;  
REQUIRE; LIST; TRANSMIT; PART; AUTHENTICITY; CERTIFY

Derwent Class: T01; W01  
International Patent Class (Main): G06F-001/00; H04L-009/00  
File Segment: EPI

9/5/18 (Item 13 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014066159 \*\*Image available\*\*  
WPI Acc No: 2001-550372/200162  
XRPX Acc No: N01-434399

**Dataflow algorithm for symbolic computation of lowest upper bound type  
method with dynamic linking capability to verify instructions and support  
lazy loading**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM )  
Inventor: BRACHA G; LIANG S; LINDHOLM T G  
Number of Countries: 029 Number of Patents: 005  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1292526	A	20010425	CN 2000117671	A	20000526	200162 B
EP 1056005	A2	20001129	EP 2000304321	A	20000522	200166
AU 200036437	A	20001130	AU 200036437	A	20000526	200163
CA 2309768	A1	20001127	CA 2309768	A	20000526	200163
JP 2001175487	A	20010629	JP 2000151833	A	20000523	200163

Priority Applications (No Type Date): US 99321228 A 19990527

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CN 1292526	A			G06F-009/45	
EP 1056005	A2 E	38		G06F-009/445	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT					
LI LT LU LV MC MK NL PT RO SE SI					
AU 200036437	A			G06F-009/44	
CA 2309768	A1 E			G06F-009/44	
JP 2001175487	A		93	G06F-009/54	

Abstract (Basic): EP 1056005 A2

NOVELTY - A dynamic linking and loading system includes a network and a computer readable storage medium for storing a module of a computer program. A module is loaded into a module and connected to a network for a processor to determine if the instruction in the module requires a lower upper bound (LUB) class in at least two referenced modules if different to the first module. A constraint for the referenced module is written if information is required in the form of a set of two classes inherits from a specified class.

DETAILED DESCRIPTION - INDEPENDENT CLAIM - An independent claim is included for the computer program product for verifying instructions in a module of a computer program. Also a claim is included for the signal transmission.

USE - An example of a computer architecture that uses dynamic linking is a virtual machine (VM) such as the JAVATM (VM) of **sun Microsystems**, which is implemented in hardware or software and is platform independent.

ADVANTAGE - Write once, run anytime (WORA) characteristics are improved. The behavior of a program with respect to linkage errors is the same on all platforms and implementations. Testability is improved with reduced catch exceptions when linking. Users can determine the presence of modules in a reliable and simple way, e.g. the user can avoid linkage errors due to calls to different modules missing on different version of a run time environment in a list of programs not executed in the program branch by lazy linking.

DESCRIPTION OF DRAWING(S) - The drawing shows a view of a exemplary computer system suitable for carrying out the method and system.

Processing unit (100)  
Disk drives (110a,110b)  
Display (120)  
Keyboard (130)



pp; 38 DwgNo 1/9  
Title Terms: ALGORITHM; SYMBOL; COMPUTATION; LOW; UPPER; BOUND; TYPE;  
METHOD; DYNAMIC; LINK; CAPABLE; VERIFICATION; INSTRUCTION; SUPPORT; LAZY;  
LOAD  
Derwent Class: T01  
International Patent Class (Main): G06F-009/44; G06F-009/445; G06F-009/45;  
G06F-009/54  
International Patent Class (Additional): G06F-009/445  
File Segment: EPI

9/5/19 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013965620 \*\*Image available\*\*  
WPI Acc No: 2001-449834/200148  
XRPX Acc No: N01-332886

**Computer graphic user interface for presentation, selection and access of  
information on user display screen desktop, uses associated user  
configurable sliding panel with object and lookup tables**

Patent Assignee: SUN MICROSYSTEMS INC (SUNM )  
Inventor: CALDER B H; SHANNON W A; THARAKAN G; WONG H B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6175364	B1	20010116	US 97831846	A	19970401	200148 B

Priority Applications (No Type Date): US 97831846 A 19970401

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6175364	B1	17	G06F-013/00	

Abstract (Basic): US 6175364 B1

NOVELTY - Monitor display window has associated user configurable sliding panel, which contain Java based applet application programs. User desired named sliding panels, displayed as handles are independently created within main sliding panel after existence determination. Created sliding panel object table gives indexed fields, class names and locations including handles, which is referenced within a lookup table to associate named sliding panels at desired locations.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) A computer readable medium including programmed instructions.
- (2) (2) A graphic user interface display system.

USE - Computer system graphical user interface used in Macintosh and Windows 95 operating systems.

ADVANTAGE - Improved framework for associating components with containers, such as sliding panel containers, providing reduced access times.

DESCRIPTION OF DRAWING(S) - Graphic user interface flow chart for sliding panel component object.

pp; 17 DwgNo 3/11

Title Terms: COMPUTER; GRAPHIC; USER; INTERFACE; PRESENT; SELECT; ACCESS;  
INFORMATION; USER; DISPLAY; SCREEN; ASSOCIATE; USER; CONFIGURATION; SLIDE  
; PANEL; OBJECT; TABLE

Derwent Class: T01  
International Patent Class (Main): G06F-013/00  
File Segment: EPI

9/5/20 (Item 15 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013706968 \*\*Image available\*\*  
WPI Acc No: 2001-191192/200119  
XRPX Acc No: N01-135907

Executable software generating system for computer network has compiler which converts visual representation of software displayed by graphical user to executable code

Patent Assignee: UNIV GRIFFITH (UYGR-N); CALYTRIX TECHNOLOGIES LTD (CALY-N); DROMEY G (DROM-I); PARR S (PARR-I)

Inventor: DROMEY G; PARR S

Number of Countries: 092 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200060458	A1	20001012	WO 2000AU269	A	20000330	200119 B
AU 200034096	A	20001023	AU 200034096	A	20000330	200119
US 20020095653	A1	20020718	US 2001963069	A	20010925	200254
AU 756348	B	20030109	AU 200034096	A	20000330	200320

Priority Applications (No Type Date): AU 999495 A 19990330

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

WO 200060458	A1	E	34 G06F-009/44	
--------------	----	---	----------------	--

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200034096	A		G06F-009/44	Based on patent WO 200060458
--------------	---	--	-------------	------------------------------

US 20020095653	A1		G06F-009/44	
----------------	----	--	-------------	--

AU 756348	B		G06F-009/44	Previous Publ. patent AU 200034096 Based on patent WO 200060458
-----------	---	--	-------------	--------------------------------------------------------------------

Abstract (Basic): WO 200060458 A1

NOVELTY - The platform independent executable programs and broadcast channels are integrated by graphical user interface to display visual representation of software. A compiler converts the visual representation of software to executable code. The program has input (X) and two outputs (STD-OUT1,STD-OUT2). An INDEPENDENT CLAIM is also included for executable software generating method.

USE - In computer network for generating executable software e.g. COM, DCOM and active X from Microsoft; SOM, DSOM from IBM; Java, JavaBeans and enterprise JavaBeans from sun Microsystems ; CORBA and OMA from open management group.

ADVANTAGE - The component integration is not a programming exercise instead it is reduced to activity in which input-output relationships between components are specified graphically.

DESCRIPTION OF DRAWING(S) - The figure shows the components of executable program generating system.

Outputs (STD-OUT1,STD-OUT2)

Input (X)

pp; 34 DwgNo 3/23

Title Terms: EXECUTE; SOFTWARE; GENERATE; SYSTEM; COMPUTER; NETWORK;

COMPILE; CONVERT; VISUAL; REPRESENT; SOFTWARE; DISPLAY; GRAPHICAL; USER; EXECUTE; CODE

Derwent Class: T01

International Patent Class (Main): G06F-009/44

International Patent Class (Additional): G06F-009/45

File Segment: EPI

9/5/21 (Item 16 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013576410 \*\*Image available\*\*

WPI Acc No: 2001-060617/200107

XRPX Acc No: N01-045412

Universal serial bus based flash memory in computer host, has USB controller to control flash memory module and USB connector based on packet received from USB defined bus, to write and read data to and from module

Patent Assignee: M SYSTEMS FLASH DISK PIONEERS LTD (MSYS-N); FRIEDMAN M M (FRIE-I)

Inventor: BAN A; MORAN D; OGDAN O

Number of Countries: 091 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200060476	A1	20001012	WO 2000US7087	A	20000320	200107 B
AU 200037564	A	20001023	AU 200037564	A	20000320	200107
US 6148354	A	20001114	US 99285706	A	19990405	200107
BR 200006063	A	20010320	BR 20006063	A	20000320	200123
			WO 2000US7087	A	20000320	
EP 1092193	A1	20010418	EP 2000916466	A	20000320	200123
			WO 2000US7087	A	20000320	
CN 1304509	A	20010718	CN 2000800509	A	20000320	200163
KR 2001071332	A	20010728	KR 2000713327	A	20001127	200208
JP 2002541554	W	20021203	JP 2000609899	A	20000320	200309
			WO 2000US7087	A	20000320	

Priority Applications (No Type Date): US 99285706 A 19990405

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

WO 200060476	A1 E	28	G06F-013/36	
--------------	------	----	-------------	--

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200037564	A		G06F-013/36	Based on patent WO 200060476
--------------	---	--	-------------	------------------------------

US 6148354	A		G06F-012/00	
------------	---	--	-------------	--

BR 200006063	A		G06F-013/36	Based on patent WO 200060476
--------------	---	--	-------------	------------------------------

EP 1092193	A1 E		G06F-013/36	Based on patent WO 200060476
------------	------	--	-------------	------------------------------

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

CN 1304509	A		G06F-013/36	
------------	---	--	-------------	--

KR 2001071332	A		G06F-013/36	
---------------	---	--	-------------	--

JP 2002541554	W	32	G06F-013/10	Based on patent WO 200060476
---------------	---	----	-------------	------------------------------

Abstract (Basic): WO 200060476 A1

NOVELTY - The flash memory module (58) stores data. The universal serial bus (USB) connector is connected to the USB defined bus for sending and receiving packets. The USB controller (56) controls the flash memory module and USB connector, according to packet received from the USB defined bus, so that data is written to and read from the flash memory module.

DETAILED DESCRIPTION - The electrical interface connected to USB connector, receives packets from USB connector as electrical signals. The logical interface connected to interface, translates electrical signals to logic signal. The functional interface receives logic signals such that if logic signals represent USB functional packet, the functional interface sends a USB command to the USB controller according to USB functional packet. The application packet extractor extracts packet from the logic signals. The application command interpreter receives packet and determines command according to one of packet. The determined command is passed to USB controller.

USE - Universal serial bus based flash memory such as EEPROM, EPROM in computer host system. Especially for personal computers (PC) having operating system such as DOS, Windows, OS/2 or linux, Macintosh computers. Also for computers having Java-OS as operating system, graphical work stations such as computer of Sun microsystems and Silicon graphics and other computers having some version of UNIX operating system such as AIX or SOLARIS of Sun microsystems. Also for any other known and available operating system such as Windows CE for embedded systems, including cellular telephones, handheld computational devices, and palmtop computational devices and any other computational device which can be connected to network.

ADVANTAGE - The USB/flash controller is configured to provide USB functionality and compatibility along with common flash operations such

as programming, reading and erasing the flash modules. The host controller uses one of several possible protocols, either standard or proprietary to signal the next command to be performed to USB flash controller, thus the entire device acts as a dynamically attachable/detachable non-volatile storage device for host platform.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of system with flash USB device.

USB controller (56)

Memory module (58)

pp; 28 DwgNo 5/14

Title Terms: UNIVERSAL; SERIAL; BUS; BASED; FLASH; MEMORY; COMPUTER; HOST; CONTROL; CONTROL; FLASH; MEMORY; MODULE; CONNECT; BASED; PACKET; RECEIVE; DEFINE; BUS; WRITING; READ; DATA; MODULE

Derwent Class: T01

International Patent Class (Main): G06F-012/00; G06F-013/10; G06F-013/36

International Patent Class (Additional): G06F-003/06; G06F-003/08

File Segment: EPI

9/5/22 (Item 17 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

010384782

WPI Acc No: 1995-286096/199538

**Distributed processing system for network e.g. UNIX, Sun microsystems (RTM) - in which two computers linked by communication channel process data by exchanging signals between communication processing and job management processing units**

Patent Assignee: NEC CORP (NIDE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7182295	A	19950721	JP 93327137	A	19931224	199538 B

Priority Applications (No Type Date): JP 93327137 A 19931224

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 7182295	A	16	G06F-015/16	

Abstract (Basic): JP 7182295 A

The system includes two computers (1,2) connected through communication channel (3). The initial job conditions of one computer communication processing unit (102) are obtained from an acquisition unit (121). The job management data is then generated in the job management process formation unit (122). The information and job conditions are transmitted by a job initial condition transmitter (123). The previous initial conditions are transmitted through the transmitter to the other computers job management processing unit (103). A communication process waiting unit (124) waits for the outputs of the management processing unit, or the input from the standard file of the communication processing unit, or the end code.

An input data transmitter (126) transmits the data to the management processing unit. A job initial condition receiver (131) receives the data from another computer's communication processor from which the job process formation unit (132) indicates the process execution. The job management process waiting unit (133) waits for the data from the input data transmitter or the end code/output file which is input into the standard file. Then, the data is transmitted to the communication process by the output data transmitter (135). The end code of the job process when received is transmitted to the communication processing unit by the end code transmitter (136).

ADVANTAGE - Eliminates communication bottlenecks. Executes job at high speed. Renders operation transparent and user is not aware of load distribution. Provides for operation in interactive mode. Optimises use of resources.

Dwg.2/13

Title Terms: DISTRIBUTE; PROCESS; SYSTEM; NETWORK; SUN; MICROSYSTEM; RTM;

TWO; COMPUTER; LINK; COMMUNICATE; CHANNEL; PROCESS; DATA; EXCHANGE;  
SIGNAL; COMMUNICATE; PROCESS; JOB; MANAGEMENT; PROCESS; UNIT

Derwent Class: T01

International Patent Class (Main): G06F-015/16

International Patent Class (Additional): G06F-009/46

File Segment: EPI